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(71) Applicant (for all designated States except US): AROS  
APPLIED BIOTECHNOLOGY APS [DK/DK]; c/o  
Østjysk Innovation, Gustav Wieds Vej 10, DK-8000 Århus  
C (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ØRNTTOFT, Tor-  
ben, F. [DK/DK]; Helgesvej 19, DK-8230 Aabyhøj  
(DK). THYKJAER, Thomas [DK/DK]; Tranebærvej  
26, DK-8220 Brabrand (DK). DEMTRÖDER, Karin  
[DK/DK]; Solbakken 13, DK-8410 Rønne (DK).

(74) Agent: HØIBERG APS; St. Kongensgade 59B, DK-1264  
Copenhagen K (DK).

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(54) Title: GENE EXPRESSION IN BIOLOGICAL CONDITIONS

(57) Abstract: The present invention relates to a method of determining the presence or absence of a biological condition in animal tissue, wherein the expression of genes in normal tissue and tissue from the biological condition is examined and correlated to standards. The invention further relates to the treatment of the biological condition and an assay for determining the condition. More particularly the invention concerns gene expression in epithelial tissue, such as urinary bladder under both normal and abnormal conditions.

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## Gene expression in biological conditions

### Technical field of the invention

5 The present invention relates to a method of determining the presence or absence of a biological condition in animal tissue, wherein the expression of genes in normal tissue and tissue from the biological condition is examined and correlated to standards. The invention further relates to the treatment of the biological condition and an assay for determining the condition.

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### Background

15 The building of large databases containing human genome sequences is the basis for studies of gene expressions in various tissues during normal physiological and pathological conditions. Constantly (constitutively) expressed sequences as well as sequences whose expression is altered during disease processes are important for our understanding of cellular properties, and for the identification of candidate genes for future therapeutic intervention. As the number of known genes and ESTs build up in the databases, array-based simultaneous screening of thousands of genes is  
20 necessary to obtain a profile of transcriptional behaviour, and to identify key genes that either alone or in combination with other genes, control various aspects of cellular life. One cellular behaviour that has been a mystery for many years is the malignant behaviour of cancer cells. It is now known that for example defects in DNA repair can lead to cancer but the cancer-creating mechanism in heterozygous  
25 individuals is still largely unknown as is the malignant cell's ability to repeat cell cycles to avoid apoptosis to escape the immune system to invade and metastasize and to escape therapy. There are indications in these areas and excellent progress has been made, both the myriad of genes interacting with each other in a highly complex multidimensional network is making the road to insight long and contorted.

30

Similar appearing tumors – morphologically, histochemically, microscopically – can be profoundly different. They can have different invasive and metastasizing properties, as well as respond differently to therapy. There is thus a need in the art for methods which distinguish tumors and tissues on factors different than those  
35 currently in clinical use.

The malignant transformation from normal tissue to cancer is believed to be a multistep process, in which tumorsuppressor genes, that normally repress cancer growth show reduced gene expression and in which other genes that encode tumor promoting proteins (oncogenes) show an increased expression level. Several tumor suppressor genes have been identified up till now, as e.g. p16, Rb, p53 ( Nesrin Özören and Wafik S. El-Deiry, Introduction to cancer genes and growth control, In: DNA alterations in cancer, genetic and epigenetic changes, Eaton publishing, Melanie Ehrlich (ed) p. 1-43, 2000.; and references therein). They are usually identified by their lack of expression or their mutation in cancer tissue.

Other examinations have shown this downregulation of transcripts to be partly due to loss of genomic material ( loss of heterozygosity), partly to methylation of promoterregions, and partly due to unknown factors ( Nesrin Özören and Wafik S. El-Deiry, Introduction to cancer genes and growth control, In: DNA alterations in cancer, genetic and epigenetic changes, Eaton publishing, Melanie Ehrlich (ed) p. 1-43, 2000.; and references therein).

Several oncogenes are known, e.g. cyclinD1/PRAD1/BCL1, FGFs, c-MYC, BCL-2 all of which are genes that are amplified in cancer showing an increased level of transcript ( Nesrin Özören and Wafik S. El-Deiry, Introduction to cancer genes and growth control, In: DNA alterations in cancer, genetic and epigenetic changes, Eaton publishing, Melanie Ehrlich (ed) p. 1-43, 2000.; and references therein). Many of these genes are related to cell growth and directs the tumor cells to uninhibited growth. Others may be related to tissue degradation as they e.g. encode enzymes that break down the surrounding connective tissue.

### **Summary of the invention**

In one aspect the present invention relates to a method of determining the presence or absence of a biological condition in animal tissue comprising

collecting a sample comprising cells from the tissue and/or expression products from the cells,

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assaying a first expression level of at least one gene from a first gene group, wherein the gene from the first gene group is selected from genes expressed in normal tissue cells in an amount higher than expression in biological condition cells, and/or

5 assaying a second expression level of at least one gene from a second gene group, wherein the second gene group is selected from genes expressed in normal tissue cells in an amount lower than expression in biological condition cells,

10 correlating the first expression level to a standard expression level for normal tissue, and/or the second expression level to a standard expression level for biological condition cells to determine the presence or absence of a biological condition in the animal tissue.

15 Animal tissue may be tissue from any animal, preferably from a mammal, such as a horse, a cow, a dog, a cat, and more preferably the tissue is human tissue. The biological condition may be any condition exhibiting gene expression different from normal tissue. In particular the biological condition relates to a malignant or pre-malignant condition, such as a tumor or cancer.

20 Furthermore, the invention relates to a method of determining the stage of a biological condition in animal tissue,

25 comprising collecting a sample comprising cells from the tissue,

30 assaying the expression of at least a first stage gene from a first stage gene group and at least a second stage gene from a second stage gene group, wherein at least one of said genes is expressed in said first stage of the condition in a higher amount than in said second stage, and the other gene is expressed in said first stage of the condition in a lower amount than in said second stage of the condition,

35 correlating the expression level of the at least two genes to a standard level of expression determining the stage of the condition.



Thereby, it is possible to determine the biological condition in more details, such as determination of a stage and/or a grade of a tumor.

5 The methods above may be used for determining single gene expressions, however the invention also relates to a method of determining an expression pattern of a cell sample, comprising:

collecting sample comprising bladder cells and/or expression products from bladder cells,

10

determining the expression level of at least one gene in the sample, wherein at least one gene belongs to a first group of genes, said gene from the first gene group being expressed in a higher amount in normal tissue than in biological condition cells, and wherein at least one other gene belongs to a second group of genes, said gene from the second gene group being expressed in a lower amount in normal tissue than in biological condition cells, and the difference between the expression level of the first gene group in normal cells and biological condition cells being at least two-fold, obtaining an expression pattern of the bladder cell sample.

15

20

Gene expression patterns may rely on one or a few genes, but more preferred gene expression patterns relies on expression from multiple genes, whereby a combined information from several genes is obtained.

25 Further, the invention relates to a method of determining an expression pattern of a bladder cell sample independent of the proportion of submucosal, muscle, or connective tissue cells present, comprising:

determining the expression of one or more genes in a sample comprising cells, wherein the one or more genes exclude genes which are expressed in the submucosal, muscle, or connective tissue, whereby a pattern of expression is formed for the sample which is independent of the proportion of submucosal, muscle, or connective tissue cells in the sample.

30

The expression pattern may be used in a method according to this information, and accordingly, the invention also relates to a method of determining the presence or absence of a biological condition in human bladder tissue comprising,

- 5       collecting a sample comprising cells from the tissue,
- determining an expression pattern of the cells as defined above,
- correlating the determined expression pattern to a standard pattern,
- 10       determining the presence or absence of the biological condition in said tissue.
- as well as a method for determining the stage of a biological condition in animal tissue, comprising
- 15       collecting a sample comprising cells from the tissue,
- determining an expression pattern of the cells as defined above,
- 20       correlating the determined expression pattern to a standard pattern,
- determining the stage of the biological condition in said tissue.

25       The invention further relates to a method for reducing cell tumorigenicity or malignancy of a cell, said method comprising

          contacting a tumor cell with at least one peptide expressed by at least one gene selected from genes being expressed in an amount at least two-fold higher in normal cells than the amount expressed in said tumor cell, or

30       comprising

          obtaining at least one gene selected from genes being expressed in an amount at least two-fold higher in normal cells than the amount expressed in said tumor cell,

35

introducing said at least one gene into the tumor cell in a manner allowing expression of said gene(s), or

5 obtaining at least one nucleotide probe capable of hybridising with at least one gene of a tumor cell, said at least one gene being selected from genes being expressed in an amount one-fold lower in normal cells than the amount expressed in said tumor cell, and

10 introducing said at least one nucleotide probe into the tumor cell in a manner allowing the probe to hybridise to the at least one gene, thereby inhibiting expression of said at least one gene.

15 In a further aspect the invention relates to a method for producing antibodies against an expression product of a cell from a biological tissue, said method comprising the steps of

obtaining expression product(s) from at least one gene said gene being expressed as defined above,

20 immunising a mammal with said expression product(s) obtaining antibodies against the expression product.

25 The antibodies produced may be used for producing a pharmaceutical composition. Further, the invention relates to a vaccine capable of eliciting an immune response against at least one expression product from at least one gene said gene being expressed as defined above.

30 The invention furthermore relates to the use of any of the methods discussed above for producing an assay for diagnosing a biological condition in animal tissue.

Also, the invention relates to the use of a peptide as defined above as an expression product and/or the use of a gene as defined above and/or the use of a probe as defined above for preparation of a pharmaceutical composition for the treatment of a biological condition in animal tissue.

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In yet a further aspect the invention relates to an assay for determining the presence or absence of a biological condition in animal tissue, comprising

5 at least one first marker capable of detecting a first expression level of at least one gene from a first gene group, wherein the gene from the first gene group is selected from genes expressed in normal tissue cells in an amount higher than expression in biological condition cells, and/or

10 at least one second marker capable of detecting a second expression level of at least one gene from a second gene group, wherein the second gene group is selected from genes expressed in normal tissue cells in an amount lower than expression in biological condition cells.

15 In another aspect the invention relates to an assay for determining an expression pattern of a bladder cell, comprising at least a first marker and and/or a second marker, wherein the first marker is capable of detecting a gene from a first gene group as defined above, and the second marker is capable of detecting a gene from a second gene group as defined above.

## 20 Drawings

Figures 1-4. Describes genes that were only present (P) in normal urothelium and absent (A) from the other four samples (samples 1,2,3,4,5 scored as P, A, A, A, A), genes that were present in normal and superficial tumors and absent from the others (PP,AAA) etcetera. These genes could for example encode tumor inhibitors, or stage specific genes.

Figure 5. Genes that are decreased (D) in tumors compared with normal urothelium (P,D,D,D,D). These could encode tumor inhibitors.

Figure 6. Genes that are increased > 3 fold in all tumor compred to normal. Encode Tumor associated proteins.

30 Figure 7. Genes that are scored as PPPPA but decrerased in all tumors and finally absent in the most malignant solid tumor.

Figure 8. Genes that lose expression in the muscle invasive tumors, PPPAA.

Figure 9. Genes that re lost in slightly invasive tumors, PPAAA

35 Figure 10. Genes that are increased in expression level in all tumors, APPPP. Tumor specific genes.

Figure 11. Genes that are turned on in all invasive tumors, AAPPP.

Figure 12. Genes that are associated with muscle invasive tumors. AAAPP.

Figure 13. Genes that identify solid tumors only AAAAP.

Figure 14. Genes that identify mixed tumors solid/papillom of invasive type. AAAPA.

5 Figure 15. Genes that identify T1 tumors. AAPAA

Figure 16. Genes that identify superficial tumors APAAA

Figure 17 shows the absolute level (called average difference) of appr. 18,000 Expressed Sequence Tags.

10 Figure 18 shows western blots based on antibodies raised against synthetic peptides selected from the EST sequence.

### Detailed description of the invention

#### Samples

15 The samples according to the present invention may be any tissue sample, it is however often preferred to conduct the methods according to the invention on epithelial tissue, such as epithelial tissue from the bladder. In particular the epithelial tissue may be mucosa.

20 The sample may be obtained by any suitable manner known to the man skilled in the art, such as a biopsy of the tissue, or a superficial sample scraped from the tissue. The sample may be prepared by forming a cell suspension made from the tissue, or by obtaining an extract from the tissue.

25 In one embodiment it is preferred that the sample comprises substantially only cells from said tissue, such as substantially only cells from mucosa of the bladder.

#### Biological condition

30 The methods according to the invention may be used for determining any biological condition, wherein said condition leads to a change in the expression of at least one gene, and preferably a change in a variety of genes.

35

Thus, the biological condition may be any malignant or premalignant condition, in particular in bladder, such as a tumor or an adenocarcinoma, a carcinoma, a teratoma, a sarcoma, and/or a lymphoma, and/or carcinoma-in-situ, and/or dysplasia-in-situ.

5

#### **Single gene expression contra expression pattern**

The expression level may be determined as single gene approaches, i.e. wherein the determination of expression from one or two or a few genes is conducted. It is preferred that expression from at least one gene from a first (normal) group is determined, said first gene group representing genes being expressed at a higher level in normal tissue, i.e. so-called suppressors, in combination with determination of expression of at least one gene from a second group, said second group representing genes being expressed at a higher level in tissue from the biological condition than in normal tissue, i.e. so-called oncogenes. However, determination of the expression of a single gene whether belonging to the first group or second group is within the scope of the present invention. In this case it is preferred that the single gene is selected among genes having a high change in expression level from normal cells to biological condition cells.

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Another approach is determination of an expression pattern from a variety of genes, wherein the determination of the biological condition in the tissue relies on information from a variety of gene expression, i.e. rather on the combination of expressed genes than on the information from single genes.

25

#### **Bladder tumors**

The following data presented herein relates to bladder tumors, and therefore the description has focused on the gene expression level as one way of identifying genes that lose or gain function in cancer tissue. Genes showing a remarkable downregulation (or complete loss) or upregulation (gene expression gained de novo) of the expression level - measured as the mRNA transcript, during the malignant progression in bladder from normal mucosa through Ta superficial tumors to T1, slightly invasive tumors, to T2, T3 and T4 which have spread to muscle or even further into lymph nodes or other organs are within the scope of the invention, as well as genes gaining importance during the differentiation from normal towards malignancy.

30

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**Gene groups**

The present invention relates to a variety of genes identified either by an EST identification number and/or by a gene identification number. Both type of identification numbers relates to identification numbers of UniGene database, NCBI, build 18.

The various genes have been identified using Affymetrix arrays of the following product numbers:

HU35K SubA 900 184

HU35K SubB 900 185

**First gene group**

The first gene group relates to at least one, such as at least two, for example at least three, such as at least four, such as at least five, such as more than six genes being expressed in normal tissue cells in an amount higher than expression in biological condition cells. The term "normal tissue cells" relates to cells from the same type of tissue that is examined with respect to the biological condition in question. Thus, with respect to bladder tumors, the normal tissue relates to bladder tissue, in particular to normal bladder mucosa.

The first gene group therefore relates to genes being downregulated in tumors, such genes being expected to serve as tumor suppressor genes, and they are of importance as predictive markers for the disease as loss of one or more of these may signal a poor outcome or an aggressive disease course. Furthermore, they may be important targets for therapy as restoring their expression level, e.g. by gene therapy, or substitution with those peptide products or small molecules with a similar biological effect may suppress the malignant growth.

For a bladder tissue sample a gene from the first gene group is preferably selected individually from genes comprising a sequence as identified below by EST

AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CATHEPSIN ;.
AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5'

	end.
AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to contains element TAR1 repetitive element ;.
C01409_s_at	HUMGS0008391, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA256485_at	zr81e12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682126 3'.
RC_AA290679_at	zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;.
RC_AA429655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.
RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.
RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.
RC_AA491463_at	ab01d12.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839543 3'.
RC_AA025434_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.
RC_AA026030_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to PIR:A48764 A48764 calpain ;.
RC_AA054321_s_at	zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.
RC_AA099820_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.
RC_AA161043_at	zo74g11.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592676 3'.
RC_AA215379_at	zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.
RC_H09281_at	yl98f11.s1 Homo sapiens cDNA clone 46316 3'.
RC_H18836_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.
RC_H52937_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.



RC_H69547_at	yr89e02.s1 Homo sapiens cDNA clone 212474 3'.
RC_H95039_at	yv20a05.s1 Homo sapiens cDNA clone 243248 3'.
RC_N21687_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.
RC_N54841_at	yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248345 3'.
RC_N59622_at	yv74b06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248435 3'.
RC_N66312_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.
RC_N90717_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.
RC_R22189_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.
RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 39835 3'.
RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.
RC_W86375_s_at	zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.
RC_Z38289_at	H. sapiens partial cDNA sequence; clone c-05e04.

or a sequence as identified below

RC_AA621122_at	af34f04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 1033567 3'.
RC_AA129216_at	zn84b03.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 564845 3'.
RC_AA133214_s_at	zk97h05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490809 3'.
RC_H99675_at	yx35c02.s1 Homo sapiens cDNA clone 263714 3'.
RC_R87160_at	yq31h10.s1 Homo sapiens cDNA clone 197443 3'.

5 or a sequence as identified below

RC_AA429904_at	zw66d03.s1 Soares testis NHT Homo sapiens cDNA clone 781157 3'.
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or a sequence as identified below

RC_AA460273_at	zx67f05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796545 3'.
RC_AA490930_at	aa46e04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 3'.
RC_AA418072_at	zv97g08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767774 3'.
RC_H61476_s_at	yr17e08.s1 Homo sapiens cDNA clone 205574 3'.
RC_H16209_at	yl28d11.s1 Homo sapiens cDNA clone 159573 3'.
RC_N93816_at	zb63f11.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 308301 3'.
RC_H17550_at	ym41h05.s1 Homo sapiens cDNA clone 50842 3'.
RC_N36835_at	yy35f02.s1 Homo sapiens cDNA clone 273243 3'.
RC_T35289_at	EST82492 Homo sapiens cDNA 3' end similar to None.
RC_AA447977_s_at	zw82e09.s1 Soares testis NHT Homo sapiens cDNA clone 782728 3'.
RC_AA160879_at	zo62h06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591515 3'.
RC_W45051_at	zc21g08.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 323006 3'.
RC_AA040699_at	zk48g04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486102 3'.
RC_R63734_at	yi15g05.s1 Homo sapiens cDNA clone 139352 3'.
RC_T61475_at	yc06h08.s1 Homo sapiens cDNA clone 79935 3'.
H23847_at	yn71d04.r1 Homo sapiens cDNA clone 173863 5'.
RC_AA482014_at	zu98d05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:746025 3' similar to TR:G414993 G414993 CENTRIN. ;.
RC_AA143323_s_at	zo37d04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589063 3' similar to gb:M60483_rna1 PROTEIN PHOSPHATASE PP2A-ALPHA, CATALYTIC SUBUNIT (HUMAN);.
R55902_at	yg92d05.r1 Homo sapiens cDNA clone 41017 5'.
RC_AA035638_at	zk28a05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471824 3'.

AA263146_at	PMY0511 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
RC_W19222_at	zb89h05.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310809 3' similar to contains Alu repetitive element; contains element L1 repetitive element ;.
RC_AA262276_at	zs25f07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686245 3'.
H61361_s_at	yu41b03.r1 Homo sapiens cDNA clone 236333 5'.
RC_R10657_s_at	yf31e11.s1 Homo sapiens cDNA clone 128492 3'.
RC_AA227261_at	zr22h04.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664183 3'.
RC_AA477641_at	zu37b12.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 740159 3'.
RC_T70596_at	yd15f10.s1 Homo sapiens cDNA clone 108331 3'.
R31641_at	yh69e02.r1 Homo sapiens cDNA clone 135002 5'.
RC_N62855_at	yz83c04.s1 Homo sapiens cDNA clone 289638 3'.
RC_AA279695_at	zs92d10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704947 3'.
RC_H95071_s_at	yv20f02.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 243291 3'.
RC_N54385_at	yv39f05.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 245121 3'.
H15314_at	ym28c02.r1 Homo sapiens cDNA clone 49413 5'.
RC_AA151435_at	zl43h11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504741 3'.
RC_F01568_at	H. sapiens partial cDNA sequence; clone c-06g08.

or a sequence as identified below

RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
RC_W44745_at	zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.
AA482319_f_at	ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA

	clone 840868 5'.
RC_AA155820_at	zo47a08.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590006 3'.
H51340_at	yo30c06.r1 Homo sapiens cDNA clone 179434 5'.
RC_H09594_at	yl97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_N29764_at	yw91b09.s1 Homo sapiens cDNA clone 259577 3'.
R80048_at	yi91e08.r1 Homo sapiens cDNA clone 146630 5'.
AC000115_cds1_at	WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.
RC_AA100437_at	zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.
RC_R39869_at	yf63b06.s1 Homo sapiens cDNA clone 26725 3'.
RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA196790_at	zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.
RC_R39923_at	yf51d10.s1 Homo sapiens cDNA clone 25662 3'.
RC_R91819_at	yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.
AA484982_at	aa39b02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815595 5'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.

RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.
RC_AA166810_at	zo87a05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593840 3'.
RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
AA046674_at	zf12d12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376727 5'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.
RC_AA243721_at	zr68f11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668589 3'.
RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_N29345_at	yw85c10.s1 Homo sapiens cDNA clone 259026 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA156187_at	zo47c04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590022 3' similar to contains Alu repetitive element;.
RC_AA157340_at	zo42h04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589591 3'.
RC_AA343514_at	EST49299 Gall bladder I Homo sapiens cDNA 3' end.
RC_AA482224_f_at	ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.
RC_AA053021_at	zl72f02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510171 3'.
RC_AA279420_at	zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.
RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.
RC_N31597_s_at	yy20b11.s1 Homo sapiens cDNA clone 271773 3'.

U31875_at	Human Hep27 protein mRNA, complete cds.
RC_F04611_at	H. sapiens partial cDNA sequence; clone c-zse11.
AA263032_s_at	PMY0335.KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
AA447052_at	zw86b06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783827 5' similar to TR:G595950 G595950 PROTEIN N-TERMINAL ASPARAGINE AMIDOHYDROLASE. ;.
RC_AA056247_at	zf62c02.s1 Soares retina N2b4HR Homo sapiens cDNA clone 381506 3' similar to contains Alu repetitive element;.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_AA456039_at	aa03d01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812161 3'.
RC_AA461444_at	zx68b01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796585 3'.
RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
RC_AA034365_at	zf02b10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375739 3' similar to gb:J05096_rna1 SODI-UM/POTASSIUM-TRANSPORTING ATPASE ALPHA-1 CHAIN (HUMAN);contains Alu repetitive element;.
RC_N22115_s_at	yw32a09.s1 Homo sapiens cDNA clone 253912 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.
AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
AA428172_f_at	zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.
C01790_at	HUMGS0003746, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.

RC_AA026270_at	ze97f07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366949 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_H60595_s_at	yr41h02.s1 Homo sapiens cDNA clone 207891 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_N91023_at	zb41a09.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 306136 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_T51995_at	yb29e09.s1 Homo sapiens cDNA clone 72616 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PRO-STATIC ACID PHOSPHATASE PRECURSOR ;.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.
RC_AA609614_at	af15f12.s1 Soares testis NHT Homo sapiens cDNA clone 1031759 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.
AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_Z39652_at	H. sapiens partial cDNA sequence; clone c-1fg03.
AB002321_at	Human mRNA for KIAA0323 gene, partial cds.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.
RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor

	50kDa subunit, complete cds
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.
RC_AA450373_at	zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.
U77942_at	Human syntaxin 7 mRNA, complete cds.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.
RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.



RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPI- DERMAL GROWTH FACTOR RECEPTOR KINASE SUB- STRATE. ;.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR ;.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.
RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to con- tains Alu repetitive element;.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
AA147510_s_at	zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIP-

	TIONAL REGULATOR SPO8. [1] ;.
AA091412_s_at	ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.
AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HY- POTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;.
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+- ISOCITRATE DEHYDROGENASE ;.
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.

or a sequence as identified below

RC_AA599501_at	ag23g12.s1 Jia bone marrow stroma Homo sapiens cDNA clone 1071238 3'.
RC_AA443923_at	zv51a02.s1 Soares testis NHT Homo sapiens cDNA clone 757130 3'.
R82598_s_at	yj19b12.r1 Homo sapiens cDNA clone 149183 5'.

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or a sequence as identified below

RC_AA402000_at	zu55b03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741869 3' similar to TR:G452270 G452270 2-19 PROTEIN PRECURSOR. ;.
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or a sequence as identified below

RC_T40767_at	ya11a06.s1 Homo sapiens cDNA clone 61138 3':
RC_AA426454_s_at	zv61f08.s1 Soares testis NHT Homo sapiens cDNA clone 758151 3' similar to contains element TAR1 repetitive element ;.
RC_AA057620_at	zf15h06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377051 3'.
RC_AA398197_at	zt59a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'.
RC_N63332_at	yz33d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element;.
RC_H58692_s_at	yr20g08.s1 Homo sapiens cDNA clone 205886 3' similar to SP:FTDH_RAT P28037 FORMYLTETRAHYDROFOLATE DE-HYDROGENASE ;.

or a sequence as identified below

zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.	RC_AA158234_at
yo61a11.s1 Homo sapiens cDNA clone 182396 3'.	RC_H42123_at
H. sapiens partial cDNA sequence; clone c-13f02.	RC_Z39200_at
yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	RC_N21687_at
Homo sapiens mRNA for uroplakin II.	Y13645_at
zb86b03.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310445 3'.	RC_N98461_at
zd99d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 357619 3'.	RC_W92449_at
H. sapiens partial cDNA sequence; clone c-13c12.	RC_Z39191_at
zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.	RC_AA125808_at
ya11a06.s1 Homo sapiens cDNA clone 61138 3'.	RC_T40767_at
yb29c05.s1 Homo sapiens cDNA clone 72584 3'.	RC_T51972_at
zs58b06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701651 3'.	RC_AA286862_at
yw91b09.s1 Homo sapiens cDNA clone 259577 3'.	RC_N29764_at
zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.	AA428172_f_at
yj35d05.s1 Homo sapiens cDNA clone 150729 3'.	RC_H02265_at
zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.	RC_W44745_at
yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.	RC_R91819_at
zx84d05.r1 Soares ovary tumor NbHOT Homo sapiens cDNA	AA464468_at

clone 810441 5'.	
zp78e01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626328 3' similar to TR:G998813 G998813 TIF1. [1] ;.	RC_AA188647_at
zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to TR:G780241 G780241 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. ;.	RC_AA405832_at
zc13b12.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.t3 LTR2 repetitive element ;.	RC_W37778_f_at
Homo sapiens breast cancer-specific protein 1 (BCSG1) mRNA, complete cds.	AF010126_at
yx83a05.r1 Homo sapiens cDNA clone 268304 5'.	N36432_at
zr74c04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669126 3' similar to gb:S69002 ECOTROPIC VIRUS INTEGRATION 1 SITE PROTEIN (HUMAN);.	RC_AA236533_s_at
zt55e05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726272 3'.	RC_AA293163_at
zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.	RC_AA196790_at
zr53g12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 667174 3'.	RC_AA253220_at
zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.	RC_AA100437_at
zt28d03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.	RC_AA293300_s_at
H. sapiens partial cDNA sequence; clone c-1fg03.	RC_Z39652_at
Human glutathione transferase M2 (GSTM2) mRNA, complete cds.	M63509_s_at
H. sapiens partial cDNA sequence; clone c-1ke11.	RC_Z39842_at
yx78e10.s1 Homo sapiens cDNA clone 267882 3'.	RC_N23319_at
zs78d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703605 3'.	RC_AA278817_at
Homo sapiens mRNA in the region near the btk gene involved in a-gamma-globulinemia	L20773_at
yi44h05.s1 Soares placenta Nb2HP Homo sapiens cDNA clone 142137 3'.	RC_R69276_at
H. sapiens partial cDNA sequence; clone c-15d02.	RC_F02641_at
zw03a04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 768174 3' similar to contains Alu repetitive element;.	RC_AA424791_at
yf63b06.s1 Homo sapiens cDNA clone 26725 3'.	RC_R39869_at
ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.	RC_AA482224_f_at
ze76f02.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364923 3' similar to contains Alu repetitive element;contains element LTR4 repetitive element ;.	RC_AA025277_at
ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.	AA482319_f_at
ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.	RC_AA001045_at
zo10f03.s1 Stratagene neuroepithelium NT2RAMI 937234	RC_AA130645_s_at

Homo sapiens cDNA clone 567293 3' similar to SW:NI2M_BOVIN Q02369 NADH-UBIQUINONE OXIDOREDUCTASE B22 SUBUNIT ;	
zt37c02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724514 3'.	RC_AA291659_at
zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'.	AA046768_at
yl81e01.r1 Homo sapiens cDNA clone 44466 5'.	H07011_at
zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);	RC_AA293533_i_at
zn63g10.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 562914 3' similar to SW:LCFA_ECOLI P29212 LONG-CHAIN-FATTY-ACID-COA LIGASE ;	RC_AA100649_at
ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;	RC_AA017146_at
zp40g07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 611964 3'.	RC_AA180054_at
PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.	AA263032_s_at
zd46f07.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343717 5'.	W69310_at
zr05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.	RC_AA219653_at
aa91c07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838668 3'.	RC_AA457235_at
aa16h10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813475 3'.	RC_AA455967_at
yx51a09.r1 Homo sapiens cDNA clone 265240 5'.	N27670_at
za65e02.s1 Homo sapiens cDNA clone 297434 3'.	RC_N80152_at
yi22a10.s1 Homo sapiens cDNA clone 139962 3'.	RC_R64660_at
zo64g03.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591700 3'.	RC_AA147218_s_at
HUMGS0007818, Human Gene Signature, 3'-directed cDNA sequence.	C01139_at
PMY0691 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.	AA285284_at
zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.	RC_AA451685_at
zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;	AA203222_at
zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;	RC_AA394071_at
zv17e07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753924 3'.	RC_AA479096_at
zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.	RC_AA156532_at
H. sapiens partial cDNA sequence; clone c-1wg05.	RC_Z40233_at

seq2490 Homo sapiens cDNA clone 3HFLSK20-87 3'.	RC_T03927_at
EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.	AA314457_at
yy89f05.s1 Homo sapiens cDNA clone 280737 3'.	RC_N50550_at
zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.	RC_AA191524_at
yw90b12.s1 Homo sapiens cDNA clone 259487 3'.	RC_N29740_at
yy75h02.s1 Homo sapiens cDNA clone 279411 3'.	RC_N48715_at
zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.	RC_AA463637_at
zw38a06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772306 3'.	RC_AA404487_at
ym26a10.s1 Homo sapiens cDNA clone 49155 3'.	RC_H16666_at
zv24d11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754581 3'.	RC_AA406197_at
yl97b11.s1 Homo sapiens cDNA clone 46276 3'.	RC_H09594_at
zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;.	RC_AA161085_at
zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.	RC_AA452131_at
zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);.	RC_AA293533_f_at
zt59a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'.	RC_AA398197_at
zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.	AA464051_s_at
yb29e01.s1 Homo sapiens cDNA clone 72600 3'.	RC_T51990_at
zr54a11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 667196 3'.	RC_AA236356_at
zd92a04.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 356910 5' similar to contains element LTR3 repetitive element ;.	W92678_at
yz33d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element;.	RC_N63332_at
Human aorta cDNA 5'-end GEN-259H09.	C16281_s_at
zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.	RC_AA477252_at
yw20e07.r1 Homo sapiens cDNA clone 252804 5'.	H88035_s_at
Human mRNA for KIAA0389 gene, complete cds.	AB002387_at
yg45h12.s1 Homo sapiens cDNA clone 35838 3'.	RC_R45698_at
zr75g11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669284 3'.	RC_AA236542_at
EST89388 Small intestine I Homo sapiens cDNA 5' end similar to monoamine oxidase A.	AA376875_at
yg15g06.s1 Homo sapiens cDNA clone 32365 3'.	RC_R43365_at
yl83h08.s1 Homo sapiens cDNA clone 44847 3'.	RC_H06746_at
zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.	RC_AA233837_at
zf15h06.s1 Soares fetal heart NbHH19W Homo sapiens	RC_AA057620_at

cDNA clone 377051 3'.	
zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.	RC_AA450118_at
ae37b10.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897979 3'.	RC_AA598872_at
zl52g06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505594 3'.	RC_AA147646_s_at
zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.	RC_W04698_at
yv39c06.s1 Homo sapiens cDNA clone 245098 3'.	RC_N54365_at
zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.	RC_AA256208_at
zk62g01.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487440 5'.	AA046593_at
zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.	RC_AA002088_at
zr81c12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682102 3'.	RC_AA256273_at
aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.	AA491114_at
zl55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.	RC_AA293719_at
zl84c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'.	RC_AA086005_at
zw44a07.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772884 3'.	RC_AA479885_at
zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;.	AA442428_at
ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.	RC_AA486410_at
yf89f02.r1 Homo sapiens cDNA clone 29665 5'.	R15268_at
zw86a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783834 3' similar to TR:G438639 G438639 LAMIN B RECEPTOR. [1] ;.	RC_AA443658_at
ym39b01.s1 Homo sapiens cDNA clone 50559 3'.	RC_H16790_at
zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.	AA465000_s_at
yy43e04.s1 Homo sapiens cDNA clone 274014 3'.	RC_N38930_at
Human mRNA for KIAA0323 gene, partial cds.	AB002321_at
H. sapiens partial cDNA sequence; clone c-0qb09.	RC_Z38810_at
WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18	AC000115_cds1_at
zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.	RC_AA255464_at
zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.	RC_AA255628_at
yr91a03.s1 Homo sapiens cDNA clone 212620 3'.	RC_H70554_at
EST180743 Jurkat T-cells V Homo sapiens cDNA 5' end.	AA309880_at
yg21a08.s1 Homo sapiens cDNA clone 32940 3'.	RC_R43812_at

zv47a04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756750 3'.	RC_AA425636_at
yz39f01.s1 Homo sapiens cDNA clone 285433 3'.	RC_N66388_at
zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.	RC_AA279420_at
zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.	RC_AA033974_at
Homo sapiens sodium bicarbonate cotransporter (HNBC1) mRNA, complete cds.	AF007216_at
aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.	RC_AA489101_at
Human aorta cDNA 5'-end GEN-286G10.	D79601_f_at
yw70f05.s1 Homo sapiens cDNA clone 257601 3'.	RC_N30856_at
Homo sapiens clk2 mRNA, complete cds	L29218_s_at
zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPI- DERMAL GROWTH FACTOR RECEPTOR KINASE SUB- STRATE. ;.	RC_AA143726_at
zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.	AA126592_at
H. sapiens partial cDNA sequence; clone c-0xh11.	RC_F02397_s_at
zs27d03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.	RC_AA252765_at
zc36a04.s1 Soares senescent fibroblasts NbHSF Homo sapi- ens cDNA clone 324366 3'.	RC_W46846_at
zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.	RC_AA135185_at
yf73f10.s1 Homo sapiens cDNA clone 27969 3'.	RC_R40702_at
yv36d12.s1 Homo sapiens cDNA clone 244823 3'.	RC_N52565_at
zc06a02.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321482 3'.	RC_W32506_s_at
zr85c04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682470 3'.	RC_AA255539_at
zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.	RC_AA449951_at
cchn2404.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA091278_at
zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.	RC_AA236037_at
ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapi- ens cDNA 5'.	AA091412_s_at
zf12b09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376697 5'.	AA046865_at
EST27743 Cerebellum II Homo sapiens cDNA 5' end.	AA324825_at
zx79d09.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 809969 3'.	RC_AA454840_s_at
zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapi- ens cDNA clone 415370 3'.	RC_W80354_at
zt65c03.s1 Soares testis NHT Homo sapiens cDNA clone 727204 3'.	RC_AA402484_at



15h10 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	W26883_at
zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.	RC_AA262485_at
zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.	RC_AA405543_at
yx54c04.s1 Homo sapiens cDNA clone 265542 3'.	RC_N21380_at
zn77a05.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564176 3'.	RC_AA121360_s_at
Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.	L32832_s_at
Human fetal-lung cDNA 5'-end sequence.	D31313_s_at
ym45b05.r1 Homo sapiens cDNA clone 51043 5' similar to contains Alu repetitive element;.	H18718_at
zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.	RC_AA037828_at
yi04c10.s1 Homo sapiens cDNA clone 138258 3'.	RC_R67996_at
ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.	RC_AA026417_at
H. sapiens partial cDNA sequence; clone c-33a10.	RC_F11115_at
yf21e07.s1 Homo sapiens cDNA clone 127524 3'.	RC_R08871_at
zr12e05.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648608 3'.	RC_AA224324_at
zt50c01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725760 3'.	RC_AA399226_at
yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.	R66920_at
zx81a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810128 3'.	RC_AA464240_s_at
zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.	AA436536_at
yz34f07.s1 Homo sapiens cDNA clone 284965 3'.	RC_N71875_at
zk10b03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470093 3' similar to PIR:H45193 H45193 zinc finger protein ZNF65 ;.	RC_AA029288_at
yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR ;.	H27242_at
Human cytochrome P450 PCN3 gene, complete cds	J04813_s_at
aa32h08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815007 3'.	RC_AA465093_at
zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.	RC_AA282791_at
zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.	RC_AA464180_at
zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.	RC_AA149987_at
zr82h09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682241 3'.	RC_AA256680_at
zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens	AA147510_s_at

cDNA clone 505366 5'.	
yi80c10.r1 Homo sapiens cDNA clone 145554 5'.	R78119_at
H. sapiens partial cDNA sequence; clone c-0ac03.	RC_Z38407_s_at
zs58f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701711 3'.	RC_AA287107_s_at
zs57e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701604 3'.	RC_AA287042_at
ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.	AA489299_at
aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.	AA504744_at
zu47g07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741180 3'.	RC_AA402622_at
zw55e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773994 3'.	RC_AA436628_at
zt02a10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711930 3'.	RC_AA282138_at
zk75a04.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488622 5'.	AA045870_at
zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.	AA418098_at
zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8. [1] ;.	RC_AA242799_at
af12f04.s1 Soares testis NHT Homo sapiens cDNA clone 1031455 3'.	RC_AA609210_at
zo13e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 586796 3'.	RC_AA133469_at
yh25b11.r1 Homo sapiens cDNA clone 130749 5'.	R22139_at
EST176117 Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end.	AA305116_at
zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.	RC_AA027954_at
zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.	AA036900_at
ze92d07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366445 3'.	RC_AA026397_at
Human fetal brain cDNA 3'-end GEN-079C04.	RC_D59981_s_at
zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.	RC_AA284143_at
zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.	W16686_at
yw28c11.r1 Homo sapiens cDNA clone 253556 5'.	H89575_s_at
zs07g11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684548 3'.	RC_AA251003_at
zs84h09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704225 3'.	RC_AA279408_at
zt07g10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712482 3' similar to TR:G808826 G808826 HYPOTHETICAL 25.7 KD PROTEIN. ;.	RC_AA281760_at
Human mRNA for KIAA0383 gene, partial cds.	AB002381_at

zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.	AA459542_s_at
zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.	RC_AA115559_at
ye36a05.r1 Homo sapiens cDNA clone 119792 5'.	T94506_at
Human fetal brain cDNA 5'-end GEN-404F02.	D55869_s_at
Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds	L02547_at
Human syntaxin 7 mRNA, complete cds.	U77942_at
zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.	AA431505_at
zr38c08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665678 3'.	RC_AA194045_at
ze78f05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365121 3'.	RC_AA025104_at
zr65e09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668296 3'.	RC_AA242822_at
zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.	RC_AA287388_at
hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA247679_at
ab41e08.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 843398 3'.	RC_AA489383_at
zu81a08.s1 Soares testis NHT Homo sapiens cDNA clone 744374 3'.	RC_AA621188_at
ab35a01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842760 3'.	RC_AA486182_at
zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.	RC_AA393876_s_at
zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.	RC_AA034189_at
ze79b09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365177 3'.	RC_AA024866_at
zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.	RC_AA450373_at
yz78d07.r1 Homo sapiens cDNA clone 289165 5'.	N78483_at
zs94d07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705133 3'.	RC_AA281245_at
zc45b12.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN. [2] PIR:S07807 ;.	W52431_at
zw84f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783673 3'.	RC_AA446597_at
zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.	RC_AA256996_at
H.sapiens gene for cytokeratin 20	X73501_at
zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;.	RC_AA287131_at

In a preferred embodiment genes from the first gene group is preferably selected individually from genes comprising a sequence as identified below by EST

RC_N23319_at	yx78e10.s1 Homo sapiens cDNA clone 267882 3'.
RC_R43812_at	yg21a08.s1 Homo sapiens cDNA clone 32940 3'.
RC_W37778_f_at	zc13b12.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.t3 LTR2 repetitive element ;.
RC_AA001045_at	ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.
RC_AA086005_at	zl84c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'.
RC_AA191524_at	zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.
RC_AA219653_at	zr05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.
RC_AA252765_at	zs27d03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.
RC_AA293300_s_at	zt28d03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.
RC_AA405832_at	zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to TR:G780241 G780241 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. ;.
X73501_at	H.sapiens gene for cytokeratin 20
AA046768_at	zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'.
AA314457_at	EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.
AA324825_at	EST27743 Cerebellum II Homo sapiens cDNA 5' end.

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In another embodiment a gene from the first gene group is selected individually from genes comprising a sequence as identified below by EST

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Human mRNA for KIAA0372 gene, complete cds.	AB002370_at
Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.	AF000546_at
yo70c03.r1 Homo sapiens cDNA clone 183268 5'.	H43922_at
yp17b05.r1 Homo sapiens cDNA clone 187665 5' similar to contains Alu repetitive element;.	H44269_at
yw23e08.r1 Homo sapiens cDNA clone 253094 5'.	H88706_s_at
Homo sapiens epoxide hydrolase (EPHX) gene, complete cds	L25880_s_at
yw36d01.r1 Homo sapiens cDNA clone 254305 5'.	N81162_at
H. sapiens partial cDNA sequence; clone c-3ec07.	RC_F10381_s_at
EST00018 HE6W Homo sapiens cDNA clone HE6WCR108 3'.	RC_H54558_at

yr20g08.s1 Homo sapiens cDNA clone 205886 3' similar to SP:FTDH_RAT P28037 FORMYLTETRAHYDROFOLATE DEHYDROGENASE ;.	RC_H58692_s_at
yx28d06.s1 Homo sapiens cDNA clone 263051 3'.	RC_N20047_at
yv28e04.s1 Homo sapiens cDNA clone 244062 3'.	RC_N38810_at
yg51h01.s1 Homo sapiens cDNA clone 36305 3'.	RC_R46497_at
yj76a08.s1 Homo sapiens cDNA clone 154646 3'.	RC_R55001_at
EST10130 Homo sapiens cDNA 3' end similar to None.	RC_T29986_s_at
EST12901 Homo sapiens cDNA 3' end similar to None.	RC_T30214_at
ya01c07.s2 Homo sapiens cDNA clone 60204 3'.	RC_T40438_at
zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.	RC_W51910_at
zd71f09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 346121 3'.	RC_W73949_at
zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.	RC_W86375_s_at
H. sapiens partial cDNA sequence; clone c-05e04.	RC_Z38289_at
H. sapiens partial cDNA sequence; clone c-0qb04.	RC_Z38807_s_at
H. sapiens partial cDNA sequence; clone c-1ed10.	RC_Z39599_at
ze74h03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364757 3' similar to contains OFR.t1 OFR repetitive element ;.	RC_AA025351_at
zl01f04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491071 3'.	RC_AA136474_at
zk99b02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490923 3'.	RC_AA136611_at
zr48f07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666661 3'.	RC_AA233375_at
zt36c05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724424 3'.	RC_AA235621_s_at
zr72g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668978 3'.	RC_AA253331_at
zv64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758394 3'.	RC_AA393793_at
zv04a05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752624 3'.	RC_AA419547_at
zu27d11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739221 3'.	RC_AA421100_at
zw87f06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783971 3'.	RC_AA443277_at
zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.	RC_AA446570_at
zw93c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784512 3'.	RC_AA447123_at
zx06g09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785728 3'.	RC_AA449343_at
aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.	RC_AA456016_at
zv21f04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754303 3'.	RC_AA479299_at
zv17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA	RC_AA479350_at

clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ;.	
Human leukemogenic homolog protein (MEIS1) mRNA, complete cds	U85707_at
Human multispanning membrane protein mRNA, complete cds. /gb=U94831 /ntype=RNA	U94831_at
38c8 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	W27827_at
zd85a12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347422 5'.	W81301_at
H.sapiens mRNA for putative progesterone binding protein	Y12711_at
zm15c08.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 525710 5'.	AA074407_at
yy1646.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA091017_at
l7134.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA104023_at
zo95d05.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594633 5'.	AA171913_at
zr32h05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 665145 5'.	AA195678_at
zr55e05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 667328 5'.	AA227678_at
csg0306.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA247204_at
zv18b05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753969 5'.	AA479995_at

In one preferred embodiment a gene from the first gene group is selected individually from genes comprising a sequence as identified below by EST

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AF000546_at	Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.
L25880_s_at	Homo sapiens epoxide hydrolase (EPHX) gene, complete cds
RC_N20047_at	yx28d06.s1 Homo sapiens cDNA clone 263051 3'.
RC_W51910_at	zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.
RC_W86375_s_at	zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.
RC_Z38289_at	H. sapiens partial cDNA sequence; clone c-05e04.
RC_Z38807_s_at	H. sapiens partial cDNA sequence; clone c-0qb04.
RC_AA393793_at	zv64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758394 3'.
RC_AA446570_at	zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.
RC_AA456016_at	aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.
RC_AA479350_at	zv17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive

element ;.
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In yet another embodiment a gene from the first gene group is selected individually from genes comprising a sequence as identified below by EST

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yl26e06.s1 Homo sapiens cDNA clone 159394 3'.	RC_H14633_at
yz74d02.s1 Homo sapiens cDNA clone 288771 3'.	RC_N62506_at
za74g10.s1 Homo sapiens cDNA clone 298338 3'.	RC_N70481_at
za57b06.s1 Homo sapiens cDNA clone 296627 3'.	RC_N73988_at
ya88g06.s1 Homo sapiens cDNA clone 68794 3'.	RC_T53404_at
H. sapiens partial cDNA sequence; clone c-01a09.	RC_Z38149_at
H. sapiens partial cDNA sequence; clone c-0rb11.	RC_Z38849_at
zc03h03.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321269 3'.	RC_AA037409_at
zn18b04.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547759 3'.	RC_AA084318_at
zk94d04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490471 3'.	RC_AA126419_at
zm24d04.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526567 3'.	RC_AA128407_at
zp02e08.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595238 3'.	RC_AA173430_at
zt58d03.s1 Soares testis NHT Homo sapiens cDNA clone 726533 3'.	RC_AA398104_at
zt50e07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725796 3'.	RC_AA399414_at
zw72f05.s1 Soares testis NHT Homo sapiens cDNA clone 781761 3'.	RC_AA431479_at
zv08e05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753056 3'.	RC_AA436471_at
zx05e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785610 3' similar to contains Alu repetitive element;.	RC_AA449455_at
zx88d07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810829 3'.	RC_AA458899_at
zx98g09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811840 3'.	RC_AA463630_s_at
aa54d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824757 3'.	RC_AA489009_at
zc11f08.r1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322023 5'.	W37319_at

In a preferred embodiment a gene from the first gene group is selected individually from genes comprising a sequence as identified below by EST

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N75611_s_at	yw37b04.r1 Homo sapiens cDNA clone 254383 5'.
RC_H20769_at	yn64a06.s1 Homo sapiens cDNA clone 173170 3'.

RC_R54822_at	yg87f06.s1 Homo sapiens cDNA clone 40364 3'.
RC_AA058357_s_at	zl67e01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509688 3' similar to TR:G189087 G189087 NONSPECIFIC CROSSREACTING ANTIGEN. ;.
RC_AA086487_at	zn53a05.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561872 3' similar to contains Alu repetitive element;.
RC_AA456289_at	aa13e06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813154 3'.
RC_AA609539_at	af14g11.s1 Soares testis NHT Homo sapiens cDNA clone 1031684 3'.

In another embodiment a gene from the first gene group is selected individually from genes comprising a sequence as identified below by EST

N24990_s_at	yx16e10.r1 Homo sapiens cDNA clone 261930 5'.
R11267_at	yf41e08.r1 Homo sapiens cDNA clone 129446 5' similar to SP:A46661 A46661 LEUKOTRIENE B4 OMEGA-HYDROXYLASE, P-450LTB OMEGA=CYTOCHROME P-450 SUPERFAMILY MEMBER - ;.
RC_H52937_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.
RC_H69547_at	yr89e02.s1 Homo sapiens cDNA clone 212474 3'.
RC_H70047_at	yu73c12.s1 Homo sapiens cDNA clone 239446 3'.
RC_N24879_at	yx99c11.s1 Homo sapiens cDNA clone 269876 3'.
RC_N66312_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.
RC_R22189_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.
RC_R45582_at	yg44f05.s1 Homo sapiens cDNA clone 35270 3'.
RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 39835 3'.
RC_R70903_at	yi49g10.s1 Homo sapiens cDNA clone 142626 3'.
RC_AA054321_s_at	zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.
RC_AA099820_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.
RC_AA127238_at	zl17g05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 3'.
RC_AA147224_at	zo64h02.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591699 3'.
RC_AA192765_at	zq12e02.s1 Stratagene muscle 937209 Homo sapiens cDNA



	clone 629498 3'.
RC_AA195718_at	zr33d07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665197 3'.
RC_AA232114_s_at	zr28b08.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664695 3' similar to gb:L05779 SOLUBLE EPOXIDE HYDROLASE (HUMAN);.
RC_AA281770_at	zt07h12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712487 3'.
RC_AA430209_at	zw59e03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774364 3' similar to TR:G1199667 G1199667 PROTEIN KINASE C-BINDING PROTEIN ENIGMA ;.
RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.
RC_AA485115_at	aa39g12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815686 3'.
AA099391_s_at	zk85e12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489646 5'.
AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CATHEPSIN ;.
AA173505_at	zp02c06.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595210 5' similar to SW:QRI2_YEAST P43124 HYPOTHETICAL 46.1 KD PROTEIN IN PHO2-POL3 INTERGENIC REGION. [1] ;.
AA291786_s_at	zt39b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724693 5'.
AA402971_s_at	zu53f10.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741739 5'.

In yet another embodiment a gene from the first gene group is selected individually from genes comprising a sequence as identified below by EST

D84239_at	Human mRNA for IgG Fc binding protein, complete cds
RC_N54841_at	yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens

	cDNA clone 248345 3'.
RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.
RC_T98227_at	ye30d12.s1 Homo sapiens cDNA clone 119255 3'.
RC_AA215379_at	zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.
RC_AA256485_at	zr81e12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682126 3'.
RC_AA290679_at	zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;.
RC_AA425309_at	zw46c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773088 3'.
RC_AA429655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.
RC_AA456981_at	aa90h11.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838629 3' similar to contains Alu repetitive element;.
RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.
W61377_at	zd27g09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341920 5'.

### Second gene group

Genes that are up-regulated (or gained de novo) during the malignant progression of bladder cancer from normal tissue through Ta, T1, T2, T3 and T4 is also within the scope of the invention. These genes are potential oncogenes and may be those genes that create or enhance the malignant growth of the cells. The expression level of these genes may serve as predictive markers for the disease course and treatment response, as a high level may signal an aggressive disease course, and they may serve as targets for therapy, as blocking these genes by e.g. anti-sense therapy, or by biochemical means could inhibit, or slow the tumor growth. Such up-regulated (or gained de novo) genes, oncogenes, may be classified according to the present invention as genes belonging to second genes group.

With respect to bladder tumors genes belonging to the second gene group at least one, such as at least two, for example at least three, such as at least four, such as

at least five, such as more than six genes are being expressed and are preferably selected individually from genes comprising a sequence as identified below by EST

RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.
RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564116 3' similar to contains Alu repetitive element;
RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.
RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.

5 or a sequence as described below

AA402119_at	zu55d04,r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA, ;,
RC_AA102581_at	zh42d02,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550083 3',
RC_H14089_at	ym62c07,s1 Homo sapiens cDNA clone 163500 3',
RC_R46079_f_at	yg49c02,s1 Homo sapiens cDNA clone 36133 3',
RC_R67918_at	yi25g01,s1 Homo sapiens cDNA clone 140304 3',
RC_W15360_at	zc17d10,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;,
AA082171_at	zn42g07,r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5',
AA425593_at	zw48f02,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5',
F15201_at	H, sapiens partial cDNA sequence,
H15219_at	ym30f02,r1 Homo sapiens cDNA clone 49693 5',
R60368_at	yh04b02,r1 Homo sapiens cDNA clone 42052 5',
R86859_at	ym86a02,r1 Homo sapiens cDNA clone 165770 5',
RC_AA045342_at	zk59g01,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3',
RC_AA171985_at	zo98g05,s1 Stratagene ovarian cancer (#937219) Homo sapiens

	cDNA clone 594968 3',
T63174_s_at	yc04e08,r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element;;
U90268_at	Human Krit1 mRNA, complete cds,
X14787_at	Human mRNA for thrombospondin
RC_AA196991_s_at	zq10a10,s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, ;,
RC_F02470_at	H, sapiens partial cDNA sequence; clone c-10c01,
RC_F08899_at	H, sapiens partial cDNA sequence; clone c-2uc10,
RC_H15259_at	ym30c10,s1 Homo sapiens cDNA clone 49795 3',
RC_H52133_at	yo44d04,s1 Homo sapiens cDNA clone 180775 3',
RC_R17059_at	yf45a10,s2 Homo sapiens cDNA clone 129786 3',
RC_R45292_at	yg46b01,s1 Homo sapiens cDNA clone 35626 3',

or a sequence as described below

C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,
D80002_at	Human mRNA for KIAA0180 gene, partial cds
RC_AA149586_at	zl39e03,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3',
RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',
RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',
RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',
RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;;
RC_R46206_at	yj53d08,s1 Homo sapiens cDNA clone 152463 3',
RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38554 3',
AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',
AB002346_at	Human mRNA for KIAA0348 gene, complete cds,
D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,
M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds

N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',
RC_AA149044_at	zl45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',
RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',
RC_AA281743_r at	zt06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',
RC_AA406338_at	zv10f06,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',
RC_AA424524_at	zv90g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',
RC_AA435840_at	zt80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',
RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',
RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',
RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',
RC_AA148923_at	zl27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',
RC_H98653_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',
RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',
RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',
RC_T90374_at	yd43e03,s1 Homo sapiens cDNA clone 111004 3' similar to SP:POL2_MOUSE P11369 RETROVIRUS-RELATED POL POLYPROTEIN ;,
RC_Z38182_at	H, sapiens partial cDNA sequence; clone c-02a08,

or a sequence as described below

RC_AA054726_at	Zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	Zq77f02,s1 Stratagene hNT neuron (#937233) Homo sapiens

	cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	Yr31g12,s1 Homo sapiens cDNA clone 206950 3',
AA115572_s_at	Zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN, ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',
RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains Alu repetitive element;contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',
RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone

	IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',
S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial; 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;;
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',
RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,

or a sequence as described below

AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',

RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',
RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',
RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTERCELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',
AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',
AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds,
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',



RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zl74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;,,
RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;,,
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',
RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',
RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_ma1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 ;,,

RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element,;
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3',
RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zl40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',
RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen: 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;,

or a sequence as described below

RC_AA176164_i_at	zp23h11,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 610341 3',
W52431_at	zc45b12,r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN, [2] PIR:S07807 ;,
RC_AA019641_at	ze62g03,s1 Soares retina N2b4HR Homo sapiens cDNA clone 363604 3' similar to contains element L1 repetitive element ;,
RC_H13696_at	yj09e04,s1 Homo sapiens cDNA clone 148254 3',
RC_N22404_at	yw37h03,s1 Homo sapiens cDNA clone 254453 3',
RC_R07501_at	ye97f06,s1 Homo sapiens cDNA clone 125699 3',
C14412_s_at	Human fetal brain cDNA 5'-end GEN-055A09,
RC_AA236455_s_at	zr75g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669266 3',
RC_AA417030_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',
RC_F10945_at	H, sapiens partial cDNA sequence; clone c-3mb07,
RC_N29319_at	yw84a11,s1 Homo sapiens cDNA clone 258908 3',
RC_N68038_f_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3',

or a sequence as described below

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RC_AA417030_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',
RC_AA608545_at	ae53d05,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3',
RC_H09261_at	yl98c12,s1 Homo sapiens cDNA clone 46410 3' similar to contains Alu repetitive element;contains MSR1 repetitive element ;,
RC_N68871_at	za23h07,s1 Homo sapiens cDNA clone 293437 3' similar to contains Alu repetitive element;,,
AA129196_at	zn29d08,r1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 548847 5' similar to SW:NU1M_MOUSE P03888 NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 1 ;,

RC_AA620553_s_at	ae58g12,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 951142 3',
RC_F10779_at	H, sapiens partial cDNA sequence; clone c-3jg08,
RC_F10945_at	H, sapiens partial cDNA sequence; clone c-3mb07,
RC_H65650_at	yr72d10,s1 Homo sapiens cDNA clone 210835 3',
RC_N68038_f_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3',

or a sequence as described below

RC_AA417030_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',
RC_AA608545_at	ae53d05,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3',
RC_F10945_at	H, sapiens partial cDNA sequence; clone c-3mb07,
RC_N68038_f_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3',

- 5 In one embodiment the genes belonging to the second gene group are preferably selected individually from genes comprising sequences as identified below by EST

AB000221_at	Homo sapiens mRNA for CC chemokine, complete cds.
RC_D60296_at	Human fetal brain cDNA 3'-end GEN-097D06.
RC_D60813_at	Human fetal brain cDNA 3'-end GEN-132E11.
RC_R49708_s_at	Yg71a11.s1 Homo sapiens cDNA clone 38542 3'.
RC_Z38182_at	H. sapiens partial cDNA sequence; clone c-02a08.
RC_AA456821_at	Aa38e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815556 3'.
RC_AA608545_at	ae53d05.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3'.
RC_AA620553_s_at	ae58g12.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 951142 3'.
AA095119_at	cp3087.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.

- 10 In another embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST

M63180_at	Human threonyl-tRNA synthetase mRNA, complete cds
N89563_s_at	HFBEST-40 Human fetal brain QBoqin2 Homo sapiens cDNA.
RC_D80198_at	Human fetal brain cDNA 3'-end GEN-045C11.
RC_F01986_f_at	H. sapiens partial cDNA sequence; clone c-0kf11.
RC_H18997_at	yn51g07.s1 Homo sapiens cDNA clone 171996 3'.
RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564116 3' similar to contains Alu repetitive element;.

In yet another embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

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RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.
RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.
RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.
RC_AA133250_at	zn92a08.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 565622 3'.

In a further embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

RC_R00083_at	ye73c08.s1 Homo sapiens cDNA clone 123374 3'.
RC_R71391_at	yj80e01.s1 Homo sapiens cDNA clone 155064 3'.
RC_T23991_at	seq2147 Homo sapiens cDNA clone NHB3MK-9 3'.
RC_T79196_at	yd70f06.s1 Homo sapiens cDNA clone 113603 3' similar to contains Alu repetitive element;.
RC_AA130596_at	zo26a09.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587992 3'.
RC_AA459310_r_at	zx89d06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810923 3'.
RC_AA490965_at	aa48f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824207 3'.

U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
X56807_at	Human DSC2 mRNA for desmocollins type 2a and 2b
AA011479_at	zi01b10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5'.
AA296821_at	EST112387. Aorta endothelial cells Homo sapiens cDNA 5' end.

In a preferred embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

RC_AA054726_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	zq77f02,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',
AA115572_s_at	zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN, ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',

RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains Alu repetitive element;contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',
RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',
S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;,,
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',
RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,
AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens

	cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',
RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',
RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',
RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTERCELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',



AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',
AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',
RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zl74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;,
RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;,
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',

RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',
RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAP-TOBREVIN 2 ;,
RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;,
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3',
RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zl40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',

RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone. 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element

In a preferred embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',
RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo

	sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',
RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',
RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTERCELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',
AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTC1L1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',
AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',
RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zi74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;,

RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive ele- ment ;,
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',
RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',
RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_ma1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAP- TOBREVIN 2 ;,
RC_AA031360_s _at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;,
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapi- ens cDNA clone 545258 3',

RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zl40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',
RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;,

In a preferred embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

AA203639_at	zx58c10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446706 5' similar to contains Alu repetitive element;.
M11844_at	Human prealbumin gene, complete cds.
RC_AA206042_at	zq77f02.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repeti-

	tive element ;.
RC_N51097_at	yz03e04.s1 Homo sapiens cDNA clone 281982 3'.
RC_H05527_at	yl70f08.s1 Soares infant brain 1NIB Homo sapiens cDNA clone 43327 3'.
AA115572_s_at	zl05d11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN. ;.
RC_H12863_at	yj14b12.s1 Homo sapiens cDNA clone 148703 3'.
AA489287_at	ab36e04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5'.
RC_T96383_at	ye49h07.s1 Homo sapiens cDNA clone 121117 3'.
RC_H56453_at	yq98g12.s1 Homo sapiens cDNA clone 203878 3'.
RC_AA152194_at	zl03h01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491281 3'.
RC_Z38520_at	H. sapiens partial cDNA sequence; clone c-0ed05.
RC_R38944_at	yd06g09.s1 Homo sapiens cDNA clone 25061 3' similar to contains Alu repetitive element;.
RC_AA133926_at	zo16e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587084 3'.
RC_N69908_f_at	za68f06.s1 Homo sapiens cDNA clone 297731 3' similar to gb:X59244 ZINC FINGER PROTEIN 43 (HUMAN);.
RC_AA151945_at	zo02c02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566498 3' similar to contains Alu repetitive element;.
S83308_at	SOX5=Sry-related HMG box gene {alternatively spliced} [human, testis, mRNA, 1473 nt]
RC_AA406570_at	zv11b06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753299 3'.
RC_AA058314_at	zl67g04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509718 3' similar to contains Alu repetitive element;contains element PTR5 repetitive element ;.
RC_R98735_at	yr31g12.s1 Homo sapiens cDNA clone 206950 3'.

In a preferred embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

RC_AA054726_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	zq77f02,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',
AA115572_s_at	zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN, ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',
RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains Alu repetitive element;contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',



RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421.3',
S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;,
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',
RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,

In one embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

D80002_at	Human mRNA for KIAA0180 gene, partial cds
D82418_at	similar to none.
N28843_at	yx59d10.r1 Homo sapiens cDNA clone 266035 5'.
RC_F02541_at	H. sapiens partial cDNA sequence; clone c-12c11.
RC_N30806_at	yw65f02.s1 Homo sapiens cDNA clone 257115 3'.
RC_R33146_at	yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;.

RC_R40166_at	yf70a09.s1 Homo sapiens cDNA clone 27448 3'.
RC_R65998_at	yi23g09.s1 Homo sapiens cDNA clone 140128 3'.
RC_AA027823_at	zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3'.
RC_AA084138_at	zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'.
RC_AA223902_at	zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'.
RC_AA424524_at	zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3'.
RC_AA505136_at	aa65d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825813 3'.
AA043223_at	zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5'.

In a preferred embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,
D80002_at	Human mRNA for KIAA0180 gene, partial cds
RC_AA149586_at	zl39e03,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3',
RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',
RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',
RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',
RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element,;
RC_R46206_at	yj53d08,s1 Homo sapiens cDNA clone 152463 3',
RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38554 3',
AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',
AB002346_at	Human mRNA for KIAA0348 gene, complete cds,
D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,

M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds
N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',
RC_AA149044_at	zl45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',
RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',
RC_AA281743_r_at	zt06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',
RC_AA406338_at	zv10f06,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',
RC_AA424524_at	zv90g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',
RC_AA435840_at	zt80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',
RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',
RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',
RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',
RC_AA148923_at	zl27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',
RC_H98653_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',
RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',
RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',
RC_T90374_at	yd43e03,s1 Homo sapiens cDNA clone 111004 3' similar to SP:POL2_MOUSE P11369 RETROVIRUS-RELATED POL POLYPROTEIN ;,
RC_Z38182_at	H, sapiens partial cDNA sequence; clone c-02a08,

In another embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

RC_F03192_at	H. sapiens partial cDNA sequence; clone c-1pb12.
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RC_W81552_at	zd87g10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347682 3'.
RC_F02470_at	H. sapiens partial cDNA sequence; clone c-10c01.
RC_W44927_at	zc20b06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 322835 3' similar to PIR:S44218 S44218 testin - mouse [1] ;.
RC_R45292_at	yg46b01.s1 Homo sapiens cDNA clone 35626 3'.
RC_H62159_at	yr47b09.s1 Homo sapiens cDNA clone 208409 3' similar to contains Alu repetitive element; contains MER15 repetitive element ;.
RC_R17059_at	yf45a10.s2 Homo sapiens cDNA clone 129786 3'.
RC_H15259_at	ym30c10.s1 Homo sapiens cDNA clone 49795 3'.
W26376_at	29a6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
Y09616_at	H.sapiens mRNA for putative carboxylesterase
AA425593_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.
RC_AA279980_at	zt08e05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712544 3'.
RC_H14089_at	ym62c07.s1 Homo sapiens cDNA clone 163500 3'.
RC_R46079_f_at	yg49c02.s1 Homo sapiens cDNA clone 36133 3'.
RC_W15360_at	zc17d10.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;.
X52773_at	Human mRNA for retinoic acid receptor-like protein
RC_AA053886_s_at	ze75b05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364785 3' similar to TR:G451330 G451330 STEROL REGULATORY ELEMENT BINDING PROTEIN-2. ;.
RC_AA143493_at	zo31a10.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588474 3'.
RC_Z98492_at	Homo sapiens mRNA; expressed sequence tag; clone DKFZphsnu1_1b13, 3' read.
F15201_at	H. sapiens partial cDNA sequence.
RC_R61883_at	yh10f08.s1 Homo sapiens cDNA clone 42872 3'.
W26505_at	30e12 Human retina cDNA randomly primed sublibrary Homo

	sapiens cDNA.
RC_AA085676_at	zn53e03.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561916 3'.
AA018804_at	ze55c07.r1 Soares retina N2b4HR Homo sapiens cDNA clone 362892 5' similar to SW:RB14_RAT P35287 RAS-RELATED PROTEIN RAB-14. [1] ;.
U22963_at	Human class I histocompatibility antigen-like protein mRNA, complete cds.
RC_R09230_at	yf26d08.s1 Homo sapiens cDNA clone 127983 3'.
RC_R67918_at	yi25g01.s1 Homo sapiens cDNA clone 140304 3'.
AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA. ;.
AA082171_at	zn42g07.r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5'.
R79750_at	yi89d09.r1 Homo sapiens cDNA clone 146417 5'.
RC_AA431773_at	zw80d04.s1 Soares testis NHT Homo sapiens cDNA clone 782503 3'.
RC_AA280670_at	zs97a07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711540 3'.
AA303711_at	EST16378 Aorta endothelial cells, TNF alpha-treated Homo sapiens cDNA 5' end.
AA400361_at	zu64g03.r1 Soares testis NHT Homo sapiens cDNA clone 742804 5'.
AF007111_at	Homo sapiens MDM2-like p53-binding protein (MDMX) mRNA, complete cds.
AA504384_at	aa59c02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825218 5' similar to contains element MIR repetitive element ;.
N88108_at	K1565F Fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K1565 5' similar to EST(YD54C09.R1 ).
RC_AA447769_at	aa20e01.s1 Soares NhHMPu.S1 Homo sapiens cDNA clone 813816 3'.

In yet another preferred embodiment genes from the second gene group are selected individually from genes comprising sequences as identified below by EST.

AA402119_at	zu55d04,r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA, ;,
RC_AA102581_at	zn42d02,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550083 3',
RC_H14089_at	ym62c07,s1 Homo sapiens cDNA clone 163500 3',
RC_R46079_f_at	yg49c02,s1 Homo sapiens cDNA clone 36133 3',
RC_R67918_at	yi25g01,s1 Homo sapiens cDNA clone 140304 3',
RC_W15360_at	zc17d10,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;,
AA082171_at	zn42g07,r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5',
AA425593_at	zw48f02,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5',
F15201_at	H, sapiens partial cDNA sequence,
H15219_at	ym30f02,r1 Homo sapiens cDNA clone 49693 5',
R60368_at	yh04b02,r1 Homo sapiens cDNA clone 42052 5',
R86859_at	ym86a02,r1 Homo sapiens cDNA clone 165770 5',
RC_AA045342_at	zk59g01,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3',
RC_AA171985_at	zo98g05,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3',
T63174_s_at	yc04e08,r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element,;
U90268_at	Human Krit1 mRNA, complete cds,
X14787_at	Human mRNA for thrombospondin
RC_AA196991_s_at	zq10a10,s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, ;,
RC_F02470_at	H, sapiens partial cDNA sequence; clone c-10c01,
RC_F08899_at	H, sapiens partial cDNA sequence; clone c-2uc10,
RC_H15259_at	ym30c10,s1 Homo sapiens cDNA clone 49795 3',
RC_H52133_at	yo44d04,s1 Homo sapiens cDNA clone 180775 3',

RC_R17059_at	yf45a10,s2 Homo sapiens cDNA clone 129786 3',
RC_R45292_at	yg46b01,s1 Homo sapiens cDNA clone 35626 3',

The genes from the second gene group discussed above are preferably genes being expressed in all stages of the biological condition, such as all stages of a bladder tumor, to be used for determining the biological condition.

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Particularly, the genes from the second gene group are selected individually from genes comprising sequences as identified below by EST, and which are associated with muscle invasive tumors.

RC_R00083_at	ye73c08.s1 Homo sapiens cDNA clone 123374 3'.
RC_R71391_at	yj80e01.s1 Homo sapiens cDNA clone 155064 3'.
RC_T23991_at	seq2147 Homo sapiens cDNA clone NHB3MK-9 3'.
RC_T79196_at	yd70f06.s1 Homo sapiens cDNA clone 113603 3' similar to contains Alu repetitive element;.
RC_AA130596_at	zo26a09.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587992 3'.
RC_AA459310_r_at	zx89d06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810923 3'.
RC_AA490965_at	aa48f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824207 3'.
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
X56807_at	Human DSC2 mRNA for desmocollins type 2a and 2b
AA011479_at	zi01b10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5'.
AA296821_at	EST112387 Aorta endothelial cells Homo sapiens cDNA 5' end.

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Further, the genes from the second gene group are selected individually from genes comprising sequences as identified below by EST, and which are associated with solid tumors only.

RC_AA026418_at	ze92h01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366481 3'.
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RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07.
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3'.
RC_R59292_at	yh16a10.s1 Homo sapiens cDNA clone 37689 3'.
RC_W60582_at	zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
M63262_at	Human 5-lipoxygenase activating protein (FLAP) gene
RC_R38678_at	yc89d05.s1 Homo sapiens cDNA clone 23443 3'.
W60268_at	zd29g01.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342096 5'.
AA465016_at	zx80d02.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810051 5' similar to TR:G1020091 G1020091 NEUROPSIN. ;contains element LTR3 repetitive element ;.
RC_T79842_at	yd83f04.s1 Homo sapiens cDNA clone 114847 3'.
RC_AA206225_at	zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3'.
RC_AA449914_at	zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3'.
RC_F10211_at	H. sapiens partial cDNA sequence; clone c-3bh08.
RC_AA480109_r_a t	zv41f05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756225 3' similar to TR:G498729 G498729 ZINC FINGER PROTEIN ;.
RC_AA053102_s_a t	zl72a06.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510130 3'.
RC_AA434113_at	zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;.
RC_AA441791_at	zw62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3'.
RC_N67583_at	yz42c02.s1 Homo sapiens cDNA clone 285698 3'.
RC_T96077_at	ye47b12.s1 Homo sapiens cDNA clone 120863 3'.
AB002316_at	Human mRNA for KIAA0318 gene, partial cds.
RC_W96222_at	ze10g07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 358620 3'.



M16591_s_at	Human hemopoietic cell protein-tyrosine kinase (HCK) gene, complete cds, clone lambda-a2/1a
RC_N59808_at	yz76b12.s1 Homo sapiens cDNA clone 288959 3'.
RC_F10040_at	H. sapiens partial cDNA sequence; clone c-39g09.
RC_AA461549_at	zx62b09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3'.
RC_W68683_at	zd35d04.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342631 3'.
RC_AA084640_at	zn20d05.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3'.
C01169_at	HUMGS0007858, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA491465_at	ab04a05.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3'.
RC_W67564_s_at	zd41c07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343212 3'.
J03019_s_at	Human beta-1-adrenergic receptor mRNA, complete cds.
RC_H80622_at	yu77b06.s1 Homo sapiens cDNA clone 239795 3'.
RC_N34686_at	yy15h06.s1 Homo sapiens cDNA clone 271355 3'.
RC_R56066_s_at	yg91d08.s1 Homo sapiens cDNA clone 40992 3'.
RC_T34611_at	EST71577 Homo sapiens cDNA 3' end similar to None.
RC_AA031373_s_at	zk15e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470638 3'.
X52056_at	Human mRNA for spi-1 proto-oncogene
N77564_at	yz89g12.r1 Homo sapiens cDNA clone 290278 5'.
C01765_at	HUMGS0003713, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA496936_at	ae32d03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3'.
RC_AA027103_at	zk04e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469564 3'.
RC_R44131_at	yg32c11.s1 Homo sapiens cDNA clone 34089 3'.
RC_N67227_at	yz48f04.s1 Homo sapiens cDNA clone 286303 3'.
RC_T96677_at	ye52f03.s1 Homo sapiens cDNA clone 121373 3'.

RC_AA134965_i_at	zo23g05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587768 3'.
RC_T86600_at	yd87d10.s1 Homo sapiens cDNA clone 115219 3'.
RC_AA054087_at	zf51f03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380477 3'.
AA444374_at	zv76b10.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA 5'.
RC_H72357_at	ys04f01.s1 Homo sapiens cDNA clone 213817 3' similar to gb:J04970 CARBOXYPEPTIDASE M PRECURSOR (HUMAN);contains Alu repetitive element;.
RC_AA017045_at	ze37d11.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361173 3'.
AA010324_at	zi09c03.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430276 5'.
RC_AA234743_at	zs38b09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 687449 3'.
RC_AA055892_at	zf20d06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377483 3'.
RC_AA446650_at	zw89g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784178 3'.
H91747_s_at	ys80e03.r1 Homo sapiens cDNA clone 221116 5'.
AA401510_s_at	zu63c08.r1 Soares testis NHT Homo sapiens cDNA clone 742670 5'.
RC_W61239_at	zd31d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342259 3'.

In another embodiment the genes from the second gene group are selected individually from genes comprising sequences as identified below by EST, and which are associated with mixed tumors comprising both solid and papilloma elements of invasive type.

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AA203639_at	zx58c10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446706 5' similar to contains Alu repetitive element;.
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M11844_at	Human prealbumin gene, complete cds.
RC_AA206042_at	zq77f02.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;.
RC_N51097_at	yz03e04.s1 Homo sapiens cDNA clone 281982 3'.
RC_H05527_at	yl70f08.s1 Soares infant brain 1NIB Homo sapiens cDNA clone 43327 3'.
AA115572_s_at	zl05d11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN. ;.
RC_H12863_at	yj14b12.s1 Homo sapiens cDNA clone 148703 3'.
AA489287_at	ab36e04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5'.
RC_T96383_at	ye49h07.s1 Homo sapiens cDNA clone 121117 3'.
RC_H56453_at	yq98g12.s1 Homo sapiens cDNA clone 203878 3'.
RC_AA152194_at	zl03h01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491281 3'.
RC_Z38520_at	H. sapiens partial cDNA sequence; clone c-0ed05.
RC_R38944_at	yd06g09.s1 Homo sapiens cDNA clone 25061 3' similar to contains Alu repetitive element;.
RC_AA133926_at	zo16e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587084 3'.
RC_N69908_f_at	za68f06.s1 Homo sapiens cDNA clone 297731 3' similar to gb:X59244 ZINC FINGER PROTEIN 43 (HUMAN);.
RC_AA151945_at	zo02c02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566498 3' similar to contains Alu repetitive element;.
S83308_at	SOX5=Sry-related HMG box gene {alternatively spliced} [human, testis, mRNA, 1473 nt]
RC_AA406570_at	zv11b06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753299 3'.
RC_AA058314_at	zl67g04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509718 3' similar to contains Alu repetitive element;contains element PTR5 repetitive element ;.
RC_R98735_at	yr31g12.s1 Homo sapiens cDNA clone 206950 3'.

More particularly the genes from the second gene group are selected individually from genes comprising sequences as identified below by EST, and which are associated with T1 tumors (mucosa invasive tumor)

D80002_at	Human mRNA for KIAA0180 gene, partial cds
D82418_at	similar to none.
N28843_at	yx59d10.r1 Homo sapiens cDNA clone 266035 5'.
RC_F02541_at	H. sapiens partial cDNA sequence; clone c-12c11.
RC_N30806_at	yw65f02.s1 Homo sapiens cDNA clone 257115 3'.
RC_R33146_at	yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;.
RC_R40166_at	yf70a09.s1 Homo sapiens cDNA clone 27448 3'.
RC_R65998_at	yi23g09.s1 Homo sapiens cDNA clone 140128 3'.
RC_AA02782_3_at	zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3'.
RC_AA08413_8_at	zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'.
RC_AA22390_2_at	zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'.
RC_AA42452_4_at	zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3'.
RC_AA50513_6_at	aa65d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825813 3'.
AA043223_at	zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5'.

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Even more particularly the genes from the second gene group are selected individually from genes comprising sequences as identified below by EST, and which are associated with superficial Ta tumors.

RC_F03192_at	H. sapiens partial cDNA sequence; clone c-1pb12.
RC_W81552_at	zd87g10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347682 3'.
RC_F02470_at	H. sapiens partial cDNA sequence; clone c-10c01.
RC_W44927_at	zc20b06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 322835 3' similar to PIR:S44218 S44218 testin - mouse [1] ;.
RC_R45292_at	yg46b01.s1 Homo sapiens cDNA clone 35626 3'.
RC_H62159_at	yr47b09.s1 Homo sapiens cDNA clone 208409 3' similar to contains Alu repetitive element; contains MER15 repetitive element ;.
RC_R17059_at	yf45a10.s2 Homo sapiens cDNA clone 129786 3'.
RC_H15259_at	ym30c10.s1 Homo sapiens cDNA clone 49795 3'.
W26376_at	29a6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
Y09616_at	H.sapiens mRNA for putative carboxylesterase
AA425593_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.
RC_AA279980_at	zt08e05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712544 3'.
RC_H14089_at	ym62c07.s1 Homo sapiens cDNA clone 163500 3'.
RC_R46079_f_at	yg49c02.s1 Homo sapiens cDNA clone 36133 3'.
RC_W15360_at	zc17d10.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;.
X52773_at	Human mRNA for retinoic acid receptor-like protein
RC_AA053886_s_at	ze75b05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364785 3' similar to TR:G451330 G451330 STEROL REGULATORY ELEMENT BINDING PROTEIN-2. ;.
RC_AA143493_at	zo31a10.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588474 3'.
RC_Z98492_at	Homo sapiens mRNA; expressed sequence tag; clone DKFZphsnu1_1b13, 3' read.
F15201_at	H. sapiens partial cDNA sequence.
RC_R61883_at	yh10f08.s1 Homo sapiens cDNA clone 42872 3'.

W26505_at	30e12 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
RC_AA085676_at	zn53e03.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561916 3'.
AA018804_at	ze55c07.r1 Soares retina N2b4HR Homo sapiens cDNA clone 362892 5' similar to SW:RB14_RAT P35287 RAS-RELATED PROTEIN RAB-14. [1] ;.
U22963_at	Human class I histocompatibility antigen-like protein mRNA, complete cds.
RC_R09230_at	yf26d08.s1 Homo sapiens cDNA clone 127983 3'.
RC_R67918_at	yi25g01.s1 Homo sapiens cDNA clone 140304 3'.
AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA. ;.
AA082171_at	zn42g07.r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5'.
R79750_at	yi89d09.r1 Homo sapiens cDNA clone 146417 5'.
RC_AA431773_at	zw80d04.s1 Soares testis NHT Homo sapiens cDNA clone 782503 3'.
RC_AA280670_at	zs97a07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711540 3'.
AA303711_at	EST16378 Aorta endothelial cells, TNF alpha-treated Homo sapiens cDNA 5' end.
AA400361_at	zu64g03.r1 Soares testis NHT Homo sapiens cDNA clone 742804 5'.
AF007111_at	Homo sapiens MDM2-like p53-binding protein (MDMX) mRNA, complete cds.
AA504384_at	aa59c02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825218 5' similar to contains element MIR repetitive element ;.
N88108_at	K1565F Fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K1565 5' similar to EST(YD54C09.R1 ).
RC_AA447769_at	aa20e01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813816 3'.

More particularly the genes from the second gene group are selected individually from genes comprising sequences as identified below by EST, and which are associated with T1 tumors (mucosa invasive tumor).

D80002_at	Human mRNA for KIAA0180 gene, partial cds
D82418_at	similar to none.
N28843_at	yx59d10.r1 Homo sapiens cDNA clone 266035 5'.
RC_F02541_at	H. sapiens partial cDNA sequence; clone c-12c11.
RC_N30806_at	yw65f02.s1 Homo sapiens cDNA clone 257115 3'.
RC_R33146_at	yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;.
RC_R40166_at	yf70a09.s1 Homo sapiens cDNA clone 27448 3'.
RC_R65998_at	yi23g09.s1 Homo sapiens cDNA clone 140128 3'.
RC_AA02782_3_at	zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3'.
RC_AA08413_8_at	zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'.
RC_AA22390_2_at	zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'.
RC_AA42452_4_at	zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3'.
RC_AA50513_6_at	aa65d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825813 3'.
AA043223_at	zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5'.

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### Number of genes

As discussed above, it is possible to use a single gene approach determining the expression of one of the genes only, in order to determine the biological condition of the tissue. It is however preferred that expression from at least one gene from the first group, such as at least two, for example at least three, such as at least four,

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such as at least five, such as more than six genes are determined as well as expression from at least one gene from the second group, such as at least two, for example at least three, such as at least four, such as at least five, such as more than six genes are determined to obtain a more statistically significant result, that is  
5 more independent of the expression level of the individual gene.

In one embodiment expression from more genes from both groups are determined, such as determination of expression from at least two genes from either of the gene groups, such as determination of expression from at least three genes from either of  
10 the gene groups, such as determination of expression from at least four genes from either of the gene groups, such as determination of expression from at least five genes from either of the gene groups, such as determination of expression from at least six genes from either of the gene groups, such as determination of expression from at least seven genes from either of the gene groups.

15 A pattern of characteristic expression of one gene can be useful in characterizing a cell type source or a stage of disease. However, more genes may be usefully analyzed. Useful patterns include expression of at least one, two, three, five, ten, fifteen, twenty, twenty-five, fifty, seventy-five, one hundred or several hundred  
20 informative genes.

#### **Expression level**

Using the results provided in the accompanying figures, a gene is indicated as being expressed if an intensity value of greater than or equal to 20 or scored as P=present  
25 by the software is shown. Conversely, an intensity value of less than 20 or scored as A=absent indicates that the gene is not expressed above background levels. Comparison of an expression pattern to another may score a change from expressed to non-expressed, or the reverse. Alternatively, changes in intensity of expression may be scored, either increases or decreases. Any significant change  
30 can be used. Typical changes which are more than 2-fold are suitable. Changes which are greater than 5-fold are highly suitable.

The present invention in particular relates to methods using genes wherein the ratio of the expression level in normal tissue to biological condition tissue for suppressor  
35 genes or vice versa of the expression level in biological condition tissue to normal



tissue for condition genes is as high as possible, such as at least a two-fold change in expression, such as at least a three-fold change, for example at least a four fold change, such as at least a five fold change, for example at least a six fold change, such as at least a ten fold change, for example at least a fifteen fold change, such as at least a twenty fold change.

### Stages and grades

Stage of a bladder tumor indicates how deep the tumor has penetrated. Superficial tumors are termed Ta, T1, T2, T3 and T4 are used to describe increasing degrees of penetration into the muscle. The grade of a bladder tumor is expressed on a scale of I-IV (1-4) according to Bergkvist, A.; Ijungquist, A.; Moberger, B. "Classification of bladder tumours based on the cellular pattern. Preliminary report of a clinical-pathological study of 300 cases with a minimum follow-up of eight years", Acta Chir Scand., 1965, 130(4):371-8). The grade reflects the cytological appearance of the cells. Grade I cells are almost normal. Grade II cells are slightly deviant. Grade III cells are clearly abnormal. And Grade IV cells are highly abnormal. A special form of bladder malignancy is carcinoma-in-situ or dysplasia-in-situ in which the altered cells are located in-situ.

It is important to classify the stage of a cancer disease, as superficial tumors may require a less intensive treatment than invasive tumors. According to the invention the expression level of genes may be used to identify genes whose expression can be used to identify a certain stage of the disease. These "Classifiers" are divided into those which can be used to identify Ta, T2, T3, and T4 stages. In one aspect of the invention measuring the transcript level of one or more of these genes may lead to a classifier that can add supplementary information to the information obtained from the pathological T2 classification. For example gene expression levels that signify a T2 will be unfavourable to detect in a Ta tumor, as they may signal that the Ta tumor has the potential to become a T2 tumor. The opposite is probably also true, that an expression level that signify Ta will be favorable to have in a T2 tumor. In that way independent information may be obtained from T2-T4 pathological classification and a classification based on gene expression levels is made.

The method of determining the stage of a tumor may be combined with determination of the biological condition or may be an independent method as such. The dif-

ference in expression level of a gene from one stage to the expression level of the gene in another group is preferably at least two-fold, such as at least three-fold.

Thus, the invention relates to a method of determining the stage of a bladder tumor, wherein the stage is selected from bladder cancer stages Ta, T1, T2, T3 and T4 comprising assaying at least the expression of Ta stage gene from a Ta stage gene group, at least one expression of T1 stage gene from a T1 stage gene group, at least the expression of T2 stage gene from a T2 stage gene group, at least the expression of T3 stage gene from a T3 stage gene group, at least the expression of T4 stage gene from a T4 stage gene group wherein at least one gene from each gene group is expressed in a significantly different amount in that stage than in one of the other stages.

Preferably, the genes selected may be a gene from each gene group being expressed in a significantly higher amount in that stage than in one of the other stages, such as:

a Ta stage gene selected individually from any gene comprising a sequence as identified below as EST

RC_F03192_at	H. sapiens partial cDNA sequence; clone c-1pb12.
RC_W81552_at	zd87g10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347682 3'.
RC_F02470_at	H. sapiens partial cDNA sequence; clone c-10c01.
RC_W44927_at	zc20b06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 322835 3' similar to PIR:S44218 S44218 testin - mouse [1] ;.
RC_R45292_at	yg46b01.s1 Homo sapiens cDNA clone 35626 3'.
RC_H62159_at	yr47b09.s1 Homo sapiens cDNA clone 208409 3' similar to contains Alu repetitive element;contains MER15 repetitive element ;.
RC_R17059_at	yf45a10.s2 Homo sapiens cDNA clone 129786 3'.
RC_H15259_at	ym30c10.s1 Homo sapiens cDNA clone 49795 3'.
W26376_at	29a6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.

Y09616_at	H.sapiens mRNA for putative carboxylesterase
AA425593_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.
RC_AA279980_at	zt08e05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712544 3'.
RC_H14089_at	ym62c07.s1 Homo sapiens cDNA clone 163500 3'.
RC_R46079_f_at	yg49c02.s1 Homo sapiens cDNA clone 36133 3'.
RC_W15360_at	zc17d10.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;.
X52773_at	Human mRNA for retinoic acid receptor-like protein
RC_AA053886_s_at	ze75b05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364785 3' similar to TR:G451330 G451330 STE-ROL REGULATORY ELEMENT BINDING PROTEIN-2. ;.
RC_AA143493_at	zo31a10.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588474 3'.
RC_Z98492_at	Homo sapiens mRNA; expressed sequence tag; clone DKFZphsnu1_1b13, 3' read.
F15201_at	H. sapiens partial cDNA sequence.
RC_R61883_at	yh10f08.s1 Homo sapiens cDNA clone 42872 3'.
W26505_at	30e12 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
RC_AA085676_at	zn53e03.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561916 3'.
AA018804_at	ze55c07.r1 Soares retina N2b4HR Homo sapiens cDNA clone 362892 5' similar to SW:RB14_RAT P35287 RAS-RELATED PROTEIN RAB-14. [1] ;.
U22963_at	Human class I histocompatibility antigen-like protein mRNA, complete cds.
RC_R09230_at	yf26d08.s1 Homo sapiens cDNA clone 127983 3'.
RC_R67918_at	yi25g01.s1 Homo sapiens cDNA clone 140304 3'.
AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA. ;.

AA082171_at	zn42g07.r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5'.
R79750_at	yi89d09.r1 Homo sapiens cDNA clone 146417 5'.
RC_AA431773_at	zw80d04.s1 Soares testis NHT Homo sapiens cDNA clone 782503 3'.
RC_AA280670_at	zs97a07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711540 3'.
AA303711_at	EST16378 Aorta endothelial cells, TNF alpha-treated Homo sapiens cDNA 5' end.
AA400361_at	zu64g03.r1 Soares testis NHT Homo sapiens cDNA clone 742804 5'.
AF007111_at	Homo sapiens MDM2-like p53-binding protein (MDMX) mRNA, complete cds.
AA504384_at	aa59c02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825218 5' similar to contains element MIR repetitive element ;.
N88108_at	K1565F Fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K1565 5' similar to EST(YD54C09.R1 ).
RC_AA447769_at	aa20e01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813816 3'.

or a sequence as identified below

UniGene number	Homologous to
AA402119_at	Zu55d04,r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA, ;,
RC_AA102581_at	Zn42d02,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550083 3',
RC_H14089_at	Ym62c07,s1 Homo sapiens cDNA clone 163500 3',
RC_R46079_f_at	Yg49c02,s1 Homo sapiens cDNA clone 36133 3',
RC_R67918_at	Yi25g01,s1 Homo sapiens cDNA clone 140304 3',
RC_W15360_at	Zc17d10,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 pro-

	tein - mouse ;,
AA082171_at	Zn42g07,r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5',
AA425593_at	Zw48f02,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5',
F15201_at	H, sapiens partial cDNA sequence,
H15219_at	Ym30f02,r1 Homo sapiens cDNA clone 49693 5',
R60368_at	Yh04b02,r1 Homo sapiens cDNA clone 42052 5',
R86859_at	Ym86a02,r1 Homo sapiens cDNA clone 165770 5',
RC_AA045342_at	Zk59g01,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3',
RC_AA171985_at	Zo98g05,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3',
T63174_s_at	Yc04e08,r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element;,,
U90268_at	Human Krit1 mRNA, complete cds,
X14787_at	Human mRNA for thrombospondin
RC_AA196991_s_at	Zq10a10,s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, ;,,
RC_F02470_at	H, sapiens partial cDNA sequence; clone c-10c01,
RC_F08899_at	H, sapiens partial cDNA sequence; clone c-2uc10,
RC_H15259_at	Ym30c10,s1 Homo sapiens cDNA clone 49795 3',
RC_H52133_at	Yo44d04,s1 Homo sapiens cDNA clone 180775 3',
RC_R17059_at	Yf45a10,s2 Homo sapiens cDNA clone 129786 3',
RC_R45292_at	Yg46b01,s1 Homo sapiens cDNA clone 35626 3',

More preferably, a T1 stage gene is selected individually from any gene comprising a sequence as identified below

D80002_at	Human mRNA for KIAA0180 gene, partial cds
D82418_at	similar to none.
N28843_at	yx59d10.r1 Homo sapiens cDNA clone 266035 5'.
RC_F02541_at	H. sapiens partial cDNA sequence; clone c-12c11.

RC_N30806_at	yw65f02.s1 Homo sapiens cDNA clone 257115 3'.
RC_R33146_at	yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;.
RC_R40166_at	yf70a09.s1 Homo sapiens cDNA clone 27448 3'.
RC_R65998_at	yi23g09.s1 Homo sapiens cDNA clone 140128 3'.
RC_AA027823_at	zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3'.
RC_AA084138_at	zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'.
RC_AA223902_at	zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'.
RC_AA424524_at	zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3'.
RC_AA505136_at	aa65d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825813 3'.
AA043223_at	zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5'.

or a sequence as identified below

UniGene number	Homologous to
C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,
D80002_at	Human mRNA for KIAA0180 gene, partial cds
RC_AA149586_at	ZI39e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3',
RC_H68772_at	Yr83f01.s1 Homo sapiens cDNA clone 211897 3',
RC_N30806_at	Yw65f02.s1 Homo sapiens cDNA clone 257115 3',
RC_N63143_at	Yz37c12.s1 Homo sapiens cDNA clone 285238 3',
RC_R33146_at	Yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;.
RC_R46206_at	Yj53d08.s1 Homo sapiens cDNA clone 152463 3',
RC_R49731_s_at	Yg71e10.s1 Homo sapiens cDNA clone 38554 3',

AA043223_at	Zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',
AB002346_at	Human mRNA for KIAA0348 gene, complete cds,
D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,
M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds
N28843_at	Yx59d10,r1 Homo sapiens cDNA clone 266035 5',
RC_AA149044_at	Zl45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',
RC_AA258130_at	Zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',
RC_AA281743_r_at	Zt06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',
RC_AA406338_at	Zv10f06,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',
RC_AA424524_at	Zv90g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',
RC_AA435840_at	Zt80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',
RC_AA027823_at	Zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',
RC_AA084138_at	Zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',
RC_AA135406_at	Zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',
RC_AA148923_at	Zl27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',
RC_H98653_at	Yx12h06,s1 Homo sapiens cDNA clone 261563 3',
RC_N30077_at	Yw81g11,s1 Homo sapiens cDNA clone 258692 3',
RC_R40166_at	Yf70a09,s1 Homo sapiens cDNA clone 27448 3',
RC_T90374_at	Yd43e03,s1 Homo sapiens cDNA clone 111004 3' similar to SP:POL2_MOUSE P11369 RETROVIRUS-RELATED POL POLYPROTEIN ;,
RC_Z38182_at	H, sapiens partial cDNA sequence; clone c-02a08,

In yet another preferred embodiment a T2-T4 stage gene is selected individually from any gene comprising a sequence as identified below

RC_R00083_at	ye73c08.s1 Homo sapiens cDNA clone 123374 3'.
RC_R71391_at	yj80e01.s1 Homo sapiens cDNA clone 155064 3'.
RC_T23991_at	seq2147 Homo sapiens cDNA clone NHB3MK-9 3'.
RC_T79196_at	yd70f06.s1 Homo sapiens cDNA clone 113603 3' similar to contains Alu repetitive element;.
RC_AA130596_at	zo26a09.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587992 3'.
RC_AA459310_r_at	zx89d06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810923 3'.
RC_AA490965_at	aa48f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824207 3'.
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
X56807_at	Human DSC2 mRNA for desmocollins type 2a and 2b
AA011479_at	zi01b10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5'.
AA296821_at	EST112387 Aorta endothelial cells Homo sapiens cDNA 5' end.

5 or a sequence as identified below

RC_AA054726_at	Zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	Zq77f02,s1. Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	Yr31g12,s1 Homo sapiens cDNA clone 206950 3',
AA115572_s_at	Zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN, ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens



	cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',
RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains Alu repetitive ele- ment;contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',
RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',
S73288_at	small proline-rich protein SPRK [human, odontogenic kerato- cysts, mRNA Partial, 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA

	clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;,
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',
RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,

or preferably any gene comprising a sequence as identified below

AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',
RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo

	sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',
RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',
RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTERCELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',
AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',
AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',
RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zl74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;,

RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive ele- ment ;,
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',
RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',
RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAP- TOBREVIN 2 ;,
RC_AA031360_s _at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;,
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapi- ens cDNA clone 545258 3',

RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zl40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',
RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;,

or a sequence as identified below expressed in solid tumors

RC_AA026418_at	ze92h01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366481 3'.
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07.
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3'.
RC_R59292_at	yh16a10.s1 Homo sapiens cDNA clone 37689 3'.

RC_W60582_at	zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
M63262_at	Human 5-lipoxygenase activating protein (FLAP) gene
RC_R38678_at	yc89d05.s1 Homo sapiens cDNA clone 23443 3'.
W60268_at	zd29g01.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342096 5'.
AA465016_at	zx80d02.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810051 5' similar to TR:G1020091 G1020091 NEUROP-SIN. ;contains element LTR3 repetitive element ;.
RC_T79842_at	yd83f04.s1 Homo sapiens cDNA clone 114847 3'.
RC_AA206225_at	zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3'.
RC_AA449914_at	zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3'.
RC_F10211_at	H. sapiens partial cDNA sequence; clone c-3bh08.
RC_AA480109_r_at	zv41f05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756225 3' similar to TR:G498729 G498729 ZINC FINGER PROTEIN ;.
RC_AA053102_s_at	zl72a06.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510130 3'.
RC_AA434113_at	zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;.
RC_AA441791_at	zw62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3'.
RC_N67583_at	yz42c02.s1 Homo sapiens cDNA clone 285698 3'.
RC_T96077_at	ye47b12.s1 Homo sapiens cDNA clone 120863 3'.
AB002316_at	Human mRNA for KIAA0318 gene, partial cds.
RC_W96222_at	ze10g07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 358620 3'.
M16591_s_at	Human hemopoietic cell protein-tyrosine kinase (HCK) gene, complete cds, clone lambda-a2/1a
RC_N59808_at	yz76b12.s1 Homo sapiens cDNA clone 288959 3'.

RC_F10040_at	H. sapiens partial cDNA sequence; clone c-39g09.
RC_AA461549_at	zx62b09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3'.
RC_W68683_at	zd35d04.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342631 3'.
RC_AA084640_at	zn20d05.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3'.
C01169_at	HUMGS0007858, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA491465_at	ab04a05.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3'.
RC_W67564_s_at	zd41c07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343212 3'.
J03019_s_at	Human beta-1-adrenergic receptor mRNA, complete cds.
RC_H80622_at	yu77b06.s1 Homo sapiens cDNA clone 239795 3'.
RC_N34686_at	yy15h06.s1 Homo sapiens cDNA clone 271355 3'.
RC_R56066_s_at	yg91d08.s1 Homo sapiens cDNA clone 40992 3'.
RC_T34611_at	EST71577 Homo sapiens cDNA 3' end similar to None.
RC_AA031373_s_at	zk15e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470638 3'.
X52056_at	Human mRNA for spi-1 proto-oncogene
N77564_at	yz89g12.r1 Homo sapiens cDNA clone 290278 5'.
C01765_at	HUMGS0003713, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA496936_at	ae32d03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3'.
RC_AA027103_at	zk04e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469564 3'.
RC_R44131_at	yg32c11.s1 Homo sapiens cDNA clone 34089 3'.
RC_N67227_at	yz48f04.s1 Homo sapiens cDNA clone 286303 3'.
RC_T96677_at	ye52f03.s1 Homo sapiens cDNA clone 121373 3'.
RC_AA134965_i_at	zo23g05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587768 3'.
RC_T86600_at	yd87d10.s1 Homo sapiens cDNA clone 115219 3'.

RC_AA054087_at	zf51f03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380477 3'.
AA444374_at	zv76b10.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA 5'.
RC_H72357_at	ys04f01.s1 Homo sapiens cDNA clone 213817 3' similar to gb:J04970 CARBOXYPEPTIDASE M PRECURSOR (HUMAN);contains Alu repetitive element;.
RC_AA017045_at	ze37d11.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361173 3'.
AA010324_at	zi09c03.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430276 5'.
RC_AA234743_at	zs38b09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 687449 3'.
RC_AA055892_at	zf20d06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377483 3'.
RC_AA446650_at	zw89g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784178 3'.
H91747_s_at	ys80e03.r1 Homo sapiens cDNA clone 221116 5'.
AA401510_s_at	zu63c08.r1 Soares testis NHT Homo sapiens cDNA clone 742670 5'.
RC_W61239_at	zd31d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342259 3'.

or a sequence as identified below expressed in mixed tumors

AA203639_at	zx58c10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446706 5' similar to contains Alu repetitive element;.
M11844_at	Human prealbumin gene, complete cds.
RC_AA206042_at	zq77f02.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;.
RC_N51097_at	yz03e04.s1 Homo sapiens cDNA clone 281982 3'.
RC_H05527_at	yl70f08.s1 Soares infant brain 1NIB Homo sapiens cDNA clone 43327 3'.



AA115572_s_at	zl05d11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN. ;.
RC_H12863_at	yj14b12.s1 Homo sapiens cDNA clone 148703 3'.
AA489287_at	ab36e04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5'.
RC_T96383_at	ye49h07.s1 Homo sapiens cDNA clone.121117 3'.
RC_H56453_at	yq98g12.s1 Homo sapiens cDNA clone 203878 3'.
RC_AA152194_at	zl03h01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491281 3'.
RC_Z38520_at	H. sapiens partial cDNA sequence; clone c-0ed05.
RC_R38944_at	yd06g09.s1 Homo sapiens cDNA clone 25061 3' similar to contains Alu repetitive element;.
RC_AA133926_at	zo16e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587084 3'.
RC_N69908_f_at	za68f06.s1 Homo sapiens cDNA clone 297731 3' similar to gb:X59244 ZINC FINGER PROTEIN 43 (HUMAN);.
RC_AA151945_at	zo02c02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566498 3' similar to contains Alu repetitive element;.
S83308_at	SOX5=Sry-related HMG box gene {alternatively spliced} [human, testis, mRNA, 1473 nt]
RC_AA406570_at	zv11b06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753299 3'.
RC_AA058314_at	zl67g04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509718 3' similar to contains Alu repetitive element;contains element PTR5 repetitive element ;.
RC_R98735_at	yr31g12.s1 Homo sapiens cDNA clone 206950 3'.

The genes selected may be a gene from each gene group being expressed in a significantly lower amount in that stage than in one of the other stages.

## 5 Expression patterns

The objects of the invention are achieved by providing one or more of the embodiments described below. In one embodiment a method is provided for determining an expression pattern of a cell sample preferably independent of the

proportion of submucosal, muscle and connective tissue cells present. Expression is determined of one or more genes in a sample comprising cells, said genes being selected from the same genes as discussed above and shown in the tables.

5 It is an object of the present invention that characteristic patterns of expression of genes can be used to characterize different types of tissue. Thus, for example gene expression patterns can be used to characterize stages and grades of bladder tumors. Similarly, gene expression patterns can be used to distinguish cells having a bladder origin from other cells. Moreover, gene expression of cells which routinely  
10 contaminate bladder tumor biopsies has been identified, and such gene expression can be removed or subtracted from patterns obtained from bladder biopsies. Further, the gene expression patterns of single-cell solutions of bladder tumor cells have been found to be substantially without interfering expression of contaminating muscle, submucosal, and connective tissue cells than biopsy samples.

15 The one or more genes exclude genes which are expressed in the submucosal, muscle, and connective tissue. A pattern of expression is formed for the sample which is independent of the proportion of submucosal, muscle, and connective tissue cells in the sample.

20 In another aspect of the invention a method of determining an expression pattern of a cell sample is provided. Expression is determined of one or more genes in a sample comprising cells. A first pattern of expression is thereby formed for the sample. Genes which are expressed in submucosal, muscle, and connective tissue  
25 cells are removed from the first pattern of expression, forming a second pattern of expression which is independent of the proportion of submucosal, muscle, and connective tissue cells in the sample.

Another embodiment of the invention provides a method for determining an  
30 expression pattern of a bladder mucosa or bladder cancer cell. Expression is determined of one or more genes in a sample comprising bladder mucosa or bladder cancer cells; the expression determined forms a first pattern of expression. A second pattern of expression which was formed using the one or more genes and a sample comprising predominantly submucosal, muscle, and connective tissue  
35 cells, is subtracted from the first pattern of expression, forming a third pattern of

expression. The third pattern of expression reflects expression of the bladder mucosa or bladder cancer cells independent of the proportion of submucosal, muscle, and connective tissue cells present in the sample.

## 5     **Diagnosing**

10     In another embodiment of the invention a method is provided for detecting an invasive tumor in a patient. A marker is detected in a sample of a body fluid. The body fluid is selected from the group consisting of blood, plasma, serum, faeces, mucus, sputum, cerebrospinal fluid and/or urine. The marker is an mRNA or protein expression product of a gene which is more prevalent in submucosal, muscle, and connective tissue than in the body fluid. An increased amount of the marker in the body fluid indicates a tumor which has become invasive in the patient.

15     In another aspect of the invention a method is provided for diagnosing a bladder cancer. A first pattern of expression is determined of one or more genes in a sample from bladder tissue suspected of being neoplastic. The first pattern of expression is compared to a second and third reference pattern of expression. The second pattern is of the one or more genes in normal bladder mucosa and the third pattern is of the one or more genes in bladder cancer. A first pattern of expression which is found to be more similar to the third pattern than the second indicates neoplasia of the bladder tissue sample.

25     According to yet another aspect of the invention a method is provided for predicting the outcome, or prescribing a treatment of a bladder tumor. A first pattern of expression is determined of one or more genes in a bladder tumor sample. The first pattern is compared to one or more reference patterns of expression determined for bladder tumors at a grade between I and IV. The reference pattern which shares maximum similarity with the first pattern is identified. The outcome or treatment appropriate for the grade of tumor of the reference pattern with the maximum similarity is assigned to the bladder tumor sample.

35     In another embodiment of the invention a method is provided for determining the grade of a bladder tumor. A first pattern of expression is determined of one or more genes in a bladder tumor sample. The first pattern is compared to one or more reference patterns of expression determined for bladder tumors at a grade between

I and IV. The grade of the reference pattern with the maximum similarity is assigned to the bladder tumor sample.

5 Yet another embodiment of the invention provides a method to determine the stage of a bladder tumor as described above. A first pattern of expression is determined of one or more genes in a bladder tumor sample. The first pattern is compared to one or more reference patterns of expression determined for bladder tumors at different stages. The reference pattern which shares maximum similarity with the first pattern is identified. The stage of the reference pattern with the maximum similarity is  
10 assigned to the bladder tumor sample.

In still another embodiment of the invention a method is provided for identifying a tissue sample as being from bladder. A first pattern of expression is determined for one or more genes in a tissue sample. The first pattern is compared to a second  
15 pattern of expression determined, obtained for normal mucosa cells. Similarities between the first and the second patterns suggest that the tissue sample is mucosa in its origin. This method being particularly useful when diagnosing metastasis possibly distant from its origin.

20 Another aspect of the invention is a method to aid in diagnosing, predicting the outcome, or prescribing treatment of bladder cancer. A first pattern of expression is determined for one or more genes in a first bladder tissue sample. And a second pattern of expression is determined for the one or more genes in a second bladder tissue sample. The first bladder tissue sample is a normal bladder mucosa sample  
25 or an earlier stage or lower grade of bladder tumor than the second bladder tissue sample. The first pattern of expression is compared to the second pattern of expression to identify a first set of genes which are increased in the second bladder tissue sample relative to the first bladder tissue sample, and a second set of genes which are decreased in the second bladder tissue sample relative to the first bladder tissue sample. Those genes which are expressed in submucosal, muscle or  
30 connective tissue are removed from the first set of genes. Those genes which are not expressed in submucosal, muscle, or connective tissue are removed from the second set of genes.

**Independence of submucosal, muscle and connective tissue**

Since a biopsy of the tissue often contains more tissue material such as connective tissue than the tissue to be examined, when the tissue to be examined is epithelial or mucosa, the invention also relates to methods, wherein the expression pattern of the tissue is independent of the amount of connective tissue in the sample.

Biopsies contain epithelial cells that most often are the targets for the studies, and in addition many other cells that contaminate the epithelial cell fraction to a varying extent. The contaminants include histiocytes, endothelial cells, leukocytes, nerve cells, muscle cells etc. Micro dissection is the method of choice for DNA examination, but in the case of expression studies this procedure is difficult due to RNA degradation during the procedure. The epithelium may be gently removed and the expression in the remaining submucosa and underlying connective tissue (the bladder wall) monitored. Genes expressed at high or low levels in the bladder wall should be interrogated when performing expression monitoring of the mucosa and tumors. A similar approach could be used for studies of epithelia in other organs.

In one embodiment of the invention normal mucosa lining the bladder lumen from bladders for cancer is scraped off. Then biopsies is taken from the denuded submucosa and connective tissue, reaching approximately 5 mm into the bladder wall, and immediately disintegrated in guanidinium isothiocyanate. Total RNA may be extracted, pooled, and poly(A)<sup>+</sup> mRNA may be prepared from the pool followed by conversion to double-stranded cDNA and in vitro transcription into cRNA containing biotin-labeled CTP and UTP.

Genes that are expressed and genes that are not expressed in bladder wall can both interfere with the interpretation of the expression in a biopsy, and should be considered when interpreting expression intensities in tumor biopsies, as the bladder wall component of a biopsy varies in amount from biopsy to biopsy.

When having determined the pattern of genes expressed in bladder wall components said pattern may be subtracted from a pattern obtained from the sample resulting in a third pattern related to the mucosa (epithelial) cells.

In another aspect of the invention a method is provided for determining an expression pattern of a bladder tissue sample independent of the proportion of submucosal, muscle and connective tissue cells present. A single-cell suspension of disaggregated bladder tumor cells is isolated from a bladder tissue sample comprising bladder tumor cells is isolated from a bladder tissue sample comprising bladder cells, submucosal cells, muscle cells, and connective tissue cells. A pattern of expression is thus formed for the sample which is independent of the proportion of submucosal, muscle, and connective tissue cells in the bladder tissue sample.

Yet another method relates to the elimination of mRNA from bladder wall components before determining the pattern, e.g. by filtration and/or affinity chromatography to remove mRNA related to the bladder wall.

#### **Detection**

Working with human tumor material requires biopsies, and working with RNA requires freshly frozen or immediately processed biopsies, or chemical pretreatment of the biopsy. Apart from the cancer tissue, biopsies do inevitably contain many different cell types, such as cells present in the blood, connective and muscle tissue, endothelium etc. In the case of DNA studies, microdissection or laser capture are methods of choice, however the time-dependent degradation of RNA makes it difficult to perform manipulation of the tissue for more than a few minutes. Furthermore, studies of expressed sequences may be difficult on the few cells obtained via microdissection or laser capture, as these cells may have an expression pattern that deviates from the predominant pattern in a tumor due to large intratumoral heterogeneity.

In the present context high density expression arrays may be used to evaluate the impact of bladder wall components in bladder tumor biopsies, and tested preparation of single cell solutions as a means of eliminating the contaminants. The results of these evaluations permit for the design of methods of evaluating bladder samples without the interfering background noise caused by ubiquitous contaminating submucosal, muscle, and connective tissue cells. The evaluating assays of the invention may be of any type.

While high density expression arrays can be used, other techniques are also contemplated. These include other techniques for assaying for specific mRNA species, including RT-PCR and Northern Blotting, as well as techniques for assaying for particular protein products, such as ELISA, Western blotting, and enzyme assays. Gene expression patterns according to the present invention are determined by measuring any gene product of a particular gene, including mRNA and protein. A pattern may be for one or more genes.

RNA or protein can be isolated and assayed from a test sample using any techniques known in the art. They can for example be isolated from a fresh or frozen biopsy, from formalin-fixed tissue, from body fluids, such as blood, plasma, serum, urine, or sputum.

#### **Detection of expression**

Expression of genes may in general be detected by either detecting mRNA from the cells and/or detecting expression products, such as peptides and proteins.

#### **mRNA detection**

The detection of mRNA of the invention may be a tool for determining the developmental stage of a cell type which may be definable by its pattern of expression of messenger RNA. For example, in particular stages of cells, high levels of ribosomal RNA are found whereas relatively low levels of other types of messenger RNAs may be found. Where a pattern is shown to be characteristic of a stage, said stage may be defined by that particular pattern of messenger RNA expression. The mRNA population is a good determinant of a developmental stage, and may be correlated with other structural features of the cell. In this manner, cells at specific developmental stages will be characterized by the intracellular environment, as well as the extracellular environment. The present invention also allows the combination of definitions based in part upon antigens and in part upon mRNA expression. In one embodiment, the two may be combined in a single incubation step. A particular incubation condition may be found which is compatible with both hybridization recognition and non-hybridization recognition molecules. Thus, e.g. an incubation condition may be selected which allows both specificity of antibody binding and specificity of nucleic acid hybridization. This allows simultaneous performance of both types of interactions on a single matrix. Again,

where developmental mRNA patterns are correlated with structural features, or with probes which are able to hybridize to intracellular mRNA populations, a cell sorter may be used to sort specifically those cells having desired mRNA population patterns.

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It is within the general scope of the present invention to provide methods for the detection of mRNA. Such methods often involve sample extraction, PCR amplification, nucleic acid fragmentation and labeling, extension reactions, and transcription reactions.

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#### **Sample preparation**

The nucleic acid (either genomic DNA or mRNA) may be isolated from the sample according to any of a number of methods well known to those of skill in the art. One of skill will appreciate that where alterations in the copy number of a gene are to be detected genomic DNA is preferably isolated. Conversely, where expression levels of a gene or genes are to be detected, preferably RNA (mRNA) is isolated.

15

Methods of isolating total mRNA are well known to those of skill in the art. In one embodiment, the total nucleic acid is isolated from a given sample using, for example, an acid guanidinium-phenol-chloroform extraction method and polyA.sup. and mRNA is isolated by oligo dT column chromatography or by using (dT)<sub>n</sub> magnetic beads (see, e.g., Sambrook et al., Molecular Cloning: A Laboratory Manual (2nd ed.), Vols. 1-3, Cold Spring Harbor Laboratory, (1989), or Current Protocols in Molecular Biology, F. Ausubel et al., ed. Greene Publishing and Wiley-Interscience, New York (1987)).

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The sample may be from tissue and/or body fluids, as defined elsewhere herein. Before analyzing the sample, e.g., on an oligonucleotide array, it will often be desirable to perform one or more sample preparation operations upon the sample. Typically, these sample preparation operations will include such manipulations as extraction of intracellular material, e.g., nucleic acids from whole cell samples, viruses, amplification of nucleic acids, fragmentation, transcription, labeling and/or extension reactions. One or more of these various operations may be readily incorporated into the device of the present invention.

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### DNA Extraction

DNA extraction may be relevant under circumstances where possible mutations in the genes are to be determined in addition to the determination of expression of the genes.

For those embodiments where whole cells, or other tissue samples are being analyzed, it will typically be necessary to extract the nucleic acids from the cells or viruses, prior to continuing with the various sample preparation operations. Accordingly, following sample collection, nucleic acids may be liberated from the collected cells, viral coat etc. into a crude extract followed by additional treatments to prepare the sample for subsequent operations, such as denaturation of contaminating (DNA binding) proteins, purification, filtration and desalting.

Liberation of nucleic acids from the sample cells, and denaturation of DNA binding proteins may generally be performed by physical or chemical methods. For example, chemical methods generally employ lysing agents to disrupt the cells and extract the nucleic acids from the cells, followed by treatment of the extract with chaotropic salts such as guanidinium isothiocyanate or urea to denature any contaminating and potentially interfering proteins.

Alternatively, physical methods may be used to extract the nucleic acids and denature DNA binding proteins, such as physical protrusions within microchannels or sharp edged particles piercing cell membranes and extract their contents. Combinations of such structures with piezoelectric elements for agitation can provide suitable shear forces for lysis.

More traditional methods of cell extraction may also be used, e.g., employing a channel with restricted cross-sectional dimension which causes cell lysis when the sample is passed through the channel with sufficient flow pressure. Alternatively, cell extraction and denaturing of contaminating proteins may be carried out by applying an alternating electrical current to the sample. More specifically, the sample of cells is flowed through a microtubular array while an alternating electric current is applied across the fluid flow. Subjecting cells to ultrasonic agitation, or forcing cells

through microgeometry apertures, thereby subjecting the cells to high shear stress resulting in rupture are also possible extraction methods.

### **Filtration**

5 Following extraction, it will often be desirable to separate the nucleic acids from other elements of the crude extract, e.g. denatured proteins, cell membrane particles and salts. Removal of particulate matter is generally accomplished by filtration or flocculation. Further, where chemical denaturing methods are used, it may be desirable to desalt the sample prior to proceeding to the next step. Desalting  
10 of the sample and isolation of the nucleic acid may generally be carried out in a single step, e.g. by binding the nucleic acids to a solid phase and washing away the contaminating salts, or performing gel filtration chromatography on the sample passing salts through dialysis membranes. Suitable solid supports for nucleic acid binding include e.g. diatomaceous earth or silica (i.e., glass wool). Suitable gel  
15 exclusion media also well known in the art may be readily incorporated into the devices of the present invention and is commercially available from, e.g., Pharmacia and Sigma Chemical.

Alternatively, desalting methods may generally take advantage of the high  
20 electrophoretic mobility and negativity of DNA compared to other elements. Electrophoretic methods may also be utilized in the purification of nucleic acids from other cell contaminants and debris. Upon application of an appropriate electric field, the nucleic acids present in the sample will migrate toward the positive electrode and become trapped on the capture membrane. Sample impurities remaining free of  
25 the membrane are then washed away by applying an appropriate fluid flow. Upon reversal of the voltage, the nucleic acids are released from the membrane in a substantially purer form. Further, coarse filters may also be overlaid on the barriers to avoid any fouling of the barriers by particulate matter, proteins or nucleic acids, thereby permitting repeated use.

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### **Separation of contaminants by chromatography**

In a similar aspect, the high electrophoretic mobility of nucleic acids with their negative charges, may be utilized to separate nucleic acids from contaminants by utilizing a short column of a gel or other appropriate matrices or gels which will slow  
35 or retard the flow of other contaminants while allowing the faster nucleic acids to

pass.

This invention provides nucleic acid affinity matrices that bear a large number of different nucleic acid affinity ligands allowing the simultaneous selection and removal of a large number of preselected nucleic acids from the sample. Methods of producing such affinity matrices are also provided. In general the methods involve the steps of a) providing a nucleic acid amplification template array comprising a surface to which are attached at least 50 oligonucleotides having different nucleic acid sequences, and wherein each different oligonucleotide is localized in a predetermined region of said surface, the density of said oligonucleotides is greater than about 60 different oligonucleotides per 1 cm.<sup>sup.2</sup>, and all of said different oligonucleotides have an identical terminal 3' nucleic acid sequence and an identical terminal 5' nucleic acid sequence. b) amplifying said multiplicity of oligonucleotides to provide a pool of amplified nucleic acids; and c) attaching the pool of nucleic acids to a solid support.

For example, nucleic acid affinity chromatography is based on the tendency of complementary, single-stranded nucleic acids to form a double-stranded or duplex structure through complementary base pairing. A nucleic acid (either DNA or RNA) can easily be attached to a solid substrate (matrix) where it acts as an immobilized ligand that interacts with and forms duplexes with complementary nucleic acids present in a solution contacted to the immobilized ligand. Unbound components can be washed away from the bound complex to either provide a solution lacking the target molecules bound to the affinity column, or to provide the isolated target molecules themselves. The nucleic acids captured in a hybrid duplex can be separated and released from the affinity matrix by denaturation either through heat, adjustment of salt concentration, or the use of a destabilizing agent such as formamide, TWEEN.TM.-20 denaturing agent, or sodium dodecyl sulfate (SDS).

Affinity columns (matrices) are typically used either to isolate a single nucleic acid typically by providing a single species of affinity ligand. Alternatively, affinity columns bearing a single affinity ligand (e.g. oligo dt columns) have been used to isolate a multiplicity of nucleic acids where the nucleic acids all share a common sequence (e.g. a polyA).

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**Affinity matrices**

The type of affinity matrix used depends on the purpose of the analysis. For example, where it is desired to analyze mRNA expression levels of particular genes in a complex nucleic acid sample (e.g., total mRNA) it is often desirable to eliminate  
5 nucleic acids produced by genes that are constitutively overexpressed and thereby tend to mask gene products expressed at characteristically lower levels. Thus, in one embodiment, the affinity matrix can be used to remove a number of preselected gene products (e.g., actin, GAPDH, etc.). This is accomplished by providing an affinity matrix bearing nucleic acid affinity ligands complementary to the gene  
10 products (e.g., mRNAs or nucleic acids derived therefrom) or to subsequences thereof. Hybridization of the nucleic acid sample to the affinity matrix will result in duplex formation between the affinity ligands and their target nucleic acids. Upon elution of the sample from the affinity matrix, the matrix will retain the duplexes nucleic acids leaving a sample depleted of the overexpressed target nucleic acids.

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The affinity matrix can also be used to identify unknown mRNAs or cDNAs in a sample. Where the affinity matrix contains nucleic acids complementary to every known gene (e.g., in a cDNA library, DNA reverse transcribed from an mRNA, mRNA used directly or amplified, or polymerized from a DNA template) in a sample,  
20 capture of the known nucleic acids by the affinity matrix leaves a sample enriched for those nucleic acid sequences that are unknown. In effect, the affinity matrix is used to perform a subtractive hybridization to isolate unknown nucleic acid sequences. The remaining "unknown" sequences can then be purified and sequenced according to standard methods.

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The affinity matrix can also be used to capture (isolate) and thereby purify unknown nucleic acid sequences. For example, an affinity matrix can be prepared that contains nucleic acid (affinity ligands) that are complementary to sequences not previously identified, or not previously known to be expressed in a particular nucleic  
30 acid sample. The sample is then hybridized to the affinity matrix and those sequences that are retained on the affinity matrix are "unknown" nucleic acids. The retained nucleic acids can be eluted from the matrix (e.g. at increased temperature, increased destabilizing agent concentration, or decreased salt) and the nucleic acids can then be sequenced according to standard methods.

Similarly, the affinity matrix can be used to efficiently capture (isolate) a number of known nucleic acid sequences. Again, the matrix is prepared bearing nucleic acids complementary to those nucleic acids it is desired to isolate. The sample is contacted to the matrix under conditions where the complementary nucleic acid sequences hybridize to the affinity ligands in the matrix. The non-hybridized material is washed off the matrix leaving the desired sequences bound. The hybrid duplexes are then denatured providing a pool of the isolated nucleic acids. The different nucleic acids in the pool can be subsequently separated according to standard methods (e.g. gel electrophoresis).

As indicated above the affinity matrices can be used to selectively remove nucleic acids from virtually any sample containing nucleic acids (e.g. in a cDNA library, DNA reverse transcribed from an mRNA, mRNA used directly or amplified, or polymerized from a DNA template, and so forth). The nucleic acids adhering to the column can be removed by washing with a low salt concentration buffer, a buffer containing a destabilizing agent such as formamide, or by elevating the column temperature.

In one particularly preferred embodiment, the affinity matrix can be used in a method to enrich a sample for unknown RNA sequences (e.g. expressed sequence tags (ESTs)). The method involves first providing an affinity matrix bearing a library of oligonucleotide probes specific to known RNA (e.g., EST) sequences. Then, RNA from undifferentiated and/or unactivated cells and RNA from differentiated or activated or pathological (e.g., transformed) or otherwise having a different metabolic state are separately hybridized against the affinity matrices to provide two pools of RNAs lacking the known RNA sequences.

In a preferred embodiment, the affinity matrix is packed into a columnar casing. The sample is then applied to the affinity matrix (e.g. injected onto a column or applied to a column by a pump such as a sampling pump driven by an autosampler). The affinity matrix (e.g. affinity column) bearing the sample is subjected to conditions under which the nucleic acid probes comprising the affinity matrix hybridize specifically with complementary target nucleic acids. Such conditions are

accomplished by maintaining appropriate pH, salt and temperature conditions to facilitate hybridization as discussed above.

5 For a number of applications, it may be desirable to extract and separate messenger RNA from cells, cellular debris, and other contaminants. As such, the device of the present invention may, in some cases, include a mRNA purification chamber or channel. In general, such purification takes advantage of the poly-A tails on mRNA. In particular and as noted above, poly- T oligonucleotides may be immobilized within a chamber or channel of the device to serve as affinity ligands for mRNA. 10 Poly-T oligonucleotides may be immobilized upon a solid support incorporated within the chamber or channel, or alternatively, may be immobilized upon the surface(s) of the chamber or channel itself. Immobilization of oligonucleotides on the surface of the chambers or channels may be carried out by methods described herein including, e.g., oxidation and silanation of the surface followed by standard 15 DMT synthesis of the oligonucleotides.

In operation, the lysed sample is introduced to a high salt solution to increase the ionic strength for hybridization, whereupon the mRNA will hybridize to the immobilized poly-T. The mRNA bound to the immobilized poly-T oligonucleotides is then washed free in a low ionic strength buffer. The poly-T oligonucleotides may be 20 immobilized upon porous surfaces, e.g., porous silicon, zeolites silica xerogels, scintered particles, or other solid supports.

### Hybridization

Following sample preparation, the sample can be subjected to one or more different 25 analysis operations. A variety of analysis operations may generally be performed, including size based analysis using, e.g., microcapillary electrophoresis, and/or sequence based analysis using, e.g., hybridization to an oligonucleotide array.

30 In the latter case, the nucleic acid sample may be probed using an array of oligonucleotide probes. Oligonucleotide arrays generally include a substrate having a large number of positionally distinct oligonucleotide probes attached to the substrate. These arrays may be produced using mechanical or light directed synthesis methods which incorporate a combination of photolithographic methods and solid phase oligonucleotide synthesis methods.

Light directed synthesis of oligonucleotide arrays

The basic strategy for light directed synthesis of oligonucleotide arrays is as follows. The surface of a solid support, modified with photosensitive protecting groups is illuminated through a photolithographic mask, yielding reactive hydroxyl groups in the illuminated regions. A selected nucleotide, typically in the form of a 3'-O-phosphoramidite-activated deoxynucleoside (protected at the 5' hydroxyl with a photosensitive protecting group), is then presented to the surface and coupling occurs at the sites that were exposed to light. Following capping and oxidation, the substrate is rinsed and the surface is illuminated through a second mask to expose additional hydroxyl groups for coupling. A second selected nucleotide (e.g., 5'-protected, 3'-O-phosphoramidite-activated deoxynucleoside) is presented to the surface. The selective deprotection and coupling cycles are repeated until the desired set of products is obtained. Since photolithography is used the process can be readily miniaturized to generate high density arrays of oligonucleotide probes. Furthermore, the sequence of the oligonucleotides at each site is known. See Pease et al. Mechanical synthesis methods are similar to the light directed methods except involving mechanical direction of fluids for deprotection and addition in the synthesis steps.

For some embodiments, oligonucleotide arrays may be prepared having all possible probes of a given length. The hybridization pattern of the target sequence on the array may be used to reconstruct the target DNA sequence. Hybridization analysis of large numbers of probes can be used to sequence long stretches of DNA or provide an oligonucleotide array which is specific and complementary to a particular nucleic acid sequence. For example, in particularly preferred aspects, the oligonucleotide array will contain oligonucleotide probes which are complementary to specific target sequences, and individual or multiple mutations of these. Such arrays are particularly useful in the diagnosis of specific disorders which are characterized by the presence of a particular nucleic acid sequence.

Following sample collection and nucleic acid extraction, the nucleic acid portion of the sample is typically subjected to one or more preparative reactions. These preparative reactions include in vitro transcription, labeling, fragmentation, amplification and other reactions. Nucleic acid amplification increases the number of copies of the target nucleic acid sequence of interest. A variety of amplification

methods are suitable for use in the methods and device of the present invention, including for example, the polymerase chain reaction method or (PCR), the ligase chain reaction (LCR), self sustained sequence replication (3SR), and nucleic acid based sequence amplification (NASBA).

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The latter two amplification methods involve isothermal reactions based on isothermal transcription, which produce both single stranded RNA (ssRNA) and double stranded DNA (dsDNA) as the amplification products in a ratio of approximately 30 or 100 to 1, respectively. As a result, where these latter methods are employed, sequence analysis may be carried out using either type of substrate, i.e. complementary to either DNA or RNA.

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Frequently, it is desirable to amplify the nucleic acid sample prior to hybridization. One of skill in the art will appreciate that whatever amplification method is used, if a quantitative result is desired, care must be taken to use a method that maintains or controls for the relative frequencies of the amplified nucleic acids.

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#### PCR

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Methods of "quantitative" amplification are well known to those of skill in the art. For example, quantitative PCR involves simultaneously co-amplifying a known quantity of a control sequence using the same primers. This provides an internal standard that may be used to calibrate the PCR reaction. The high density array may then include probes specific to the internal standard for quantification of the amplified nucleic acid.

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Thus, in one embodiment, this invention provides for a method of optimizing a probe set for detection of a particular gene. Generally, this method involves providing a high density array containing a multiplicity of probes of one or more particular length(s) that are complementary to subsequences of the mRNA transcribed by the target gene. In one embodiment the high density array may contain every probe of a particular length that is complementary to a particular mRNA. The probes of the high density array are then hybridized with their target nucleic acid alone and then hybridized with a high complexity, high concentration nucleic acid sample that does not contain the targets complementary to the probes. Thus, for example, where the target nucleic acid is an RNA, the probes are first hybridized with their target nucleic

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acid alone and then hybridized with RNA made from a cDNA library (e.g., reverse transcribed polyA.sup.+ mRNA) where the sense of the hybridized RNA is opposite that of the target nucleic acid (to insure that the high complexity sample does not contain targets for the probes). Those probes that show a strong hybridization signal with their target and little or no cross-hybridization with the high complexity sample are preferred probes for use in the high density arrays of this invention.

PCR amplification generally involves the use of one strand of the target nucleic acid sequence as a template for producing a large number of complements to that sequence. Generally, two primer sequences complementary to different ends of a segment of the complementary strands of the target sequence hybridize with their respective strands of the target sequence, and in the presence of polymerase enzymes and nucleoside triphosphates, the primers are extended along the target sequence. The extensions are melted from the target sequence and the process is repeated, this time with the additional copies of the target sequence synthesized in the preceding steps. PCR amplification typically involves repeated cycles of denaturation, hybridization and extension reactions to produce sufficient amounts of the target nucleic acid. The first step of each cycle of the PCR involves the separation of the nucleic acid duplex formed by the primer extension. Once the strands are separated, the next step in PCR involves hybridizing the separated strands with primers that flank the target sequence. The primers are then extended to form complementary copies of the target strands. For successful PCR amplification, the primers are designed so that the position at which each primer hybridizes along a duplex sequence is such that an extension product synthesized from one primer, when separated from the template (complement), serves as a template for the extension of the other primer. The cycle of denaturation, hybridization, and extension is repeated as many times as necessary to obtain the desired amount of amplified nucleic acid.

In PCR methods, strand separation is normally achieved by heating the reaction to a sufficiently high temperature for a sufficient time to cause the denaturation of the duplex but not to cause an irreversible denaturation of the polymerase. Typical heat denaturation involves temperatures ranging from about 80.degree. C. to 105.degree. C. for times ranging from seconds to minutes. Strand separation, however, can be accomplished by any suitable denaturing method including physical, chemical, or

enzymatic means. Strand separation may be induced by a helicase, for example, or an enzyme capable of exhibiting helicase activity.

5 In addition to PCR and IVT reactions, the methods and devices of the present invention are also applicable to a number of other reaction types, e.g., reverse transcription, nick translation, and the like.

#### Labelling before hybridization

10 The nucleic acids in a sample will generally be labeled to facilitate detection in subsequent steps. Labeling may be carried out during the amplification, in vitro transcription or nick translation processes. In particular, amplification, in vitro transcription or nick translation may incorporate a label into the amplified or transcribed sequence, either through the use of labeled primers or the incorporation of labeled dNTPs into the amplified sequence.

15 Hybridization between the sample nucleic acid and the oligonucleotide probes upon the array is then detected, using, e.g., epifluorescence confocal microscopy. Typically, sample is mixed during hybridization to enhance hybridization of nucleic acids in the sample to nucleic acid probes on the array.

#### Labelling after hybridization

20 In some cases, hybridized oligonucleotides may be labeled following hybridization. For example, where biotin labeled dNTPs are used in, e.g. amplification or transcription, streptavidin linked-reporter groups may be used to label hybridized complexes. Such operations are readily integratable into the systems of the present invention. Alternatively, the nucleic acids in the sample may be labeled following  
25 amplification. Post amplification labeling typically involves the covalent attachment of a particular detectable group upon the amplified sequences. Suitable labels or detectable groups include a variety of fluorescent or radioactive labeling groups well known in the art. These labels may also be coupled to the sequences using  
30 methods that are well known in the art.

Methods for detection depend upon the label selected. A fluorescent label is preferred because of its extreme sensitivity and simplicity. Standard labeling procedures are used to determine the positions where interactions between a  
35 sequence and a reagent take place. For example, if a target sequence is labeled

and exposed to a matrix of different probes, only those locations where probes do interact with the target will exhibit any signal. Alternatively, other methods may be used to scan the matrix to determine where interaction takes place. Of course, the spectrum of interactions may be determined in a temporal manner by repeated scans of interactions which occur at each of a multiplicity of conditions. However, instead of testing each individual interaction separately, a multiplicity of sequence interactions may be simultaneously determined on a matrix.

Means of detecting labeled target (sample) nucleic acids hybridized to the probes of the high density array are known to those of skill in the art. Thus, for example, where a colorimetric label is used, simple visualization of the label is sufficient. Where a radioactive labeled probe is used, detection of the radiation (e.g with photographic film or a solid state detector) is sufficient.

In a preferred embodiment, however, the target nucleic acids are labeled with a fluorescent label and the localization of the label on the probe array is accomplished with fluorescent microscopy. The hybridized array is excited with a light source at the excitation wavelength of the particular fluorescent label and the resulting fluorescence at the emission wavelength is detected. In a particularly preferred embodiment, the excitation light source is a laser appropriate for the excitation of the fluorescent label.

The target polynucleotide may be labeled by any of a number of convenient detectable markers. A fluorescent label is preferred because it provides a very strong signal with low background. It is also optically detectable at high resolution and sensitivity through a quick scanning procedure. Other potential labeling moieties include, radioisotopes, chemiluminescent compounds, labeled binding proteins, heavy metal atoms, spectroscopic markers, magnetic labels, and linked enzymes. Another method for labeling may bypass any label of the target sequence. The target may be exposed to the probes, and a double strand hybrid is formed at those positions only. Addition of a double strand specific reagent will detect where hybridization takes place. An intercalative dye such as ethidium bromide may be used as long as the probes themselves do not fold back on themselves to a significant extent forming hairpin loops. However, the length of the hairpin loops in short oligonucleotide probes would typically be insufficient to form a stable duplex.

Suitable chromogens will include molecules and compounds which absorb light in a distinctive range of wavelengths so that a color may be observed, or emit light when irradiated with radiation of a particular wave length or wave length range, e.g., fluorescers. Biliproteins, e.g., phycoerythrin, may also serve as labels.

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A wide variety of suitable dyes are available, being primarily chosen to provide an intense color with minimal absorption by their surroundings. Illustrative dye types include quinoline dyes, triarylmethane dyes, acridine dyes, alizarine dyes, phthaleins, insect dyes, azo dyes, anthraquinoid dyes, cyanine dyes,

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phenazathionium dyes, and phenazoxonium dyes.

A wide variety of fluorescers may be employed either by themselves or in conjunction with quencher molecules. Fluorescers of interest fall into a variety of categories having certain primary functionalities. These primary functionalities include 1- and 2-aminonaphthalene, p,p'-diaminostilbenes, pyrenes, quaternary phenanthridine salts, 9-aminoacridines, p,p'-diaminobenzophenone imines, anthracenes, oxacarbocyanine, merocyanine, 3-aminoequilenin, perylene, bis-benzoxazole, bis-p-oxazolyl benzene, 1,2-benzophenazin, retinol, bis-3-aminopyridinium salts, hellebrigenin, tetracycline, sterophenol,

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benzimidzaolylphenylamine, 2-oxo-3-chromen, indole, xanthen, 7-hydroxycoumarin, phenoxazine, salicylate, strophanthidin, porphyrins, triarylmethanes and flavin. Individual fluorescent compounds which have functionalities for linking or which can be modified to incorporate such functionalities include, e.g., dansyl chloride; fluoresceins such as 3,6-dihydroxy-9-phenylxanthhydrol; rhodamineisothiocyanate;

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N-phenyl 1-amino-8-sulfonatonaphthalene; N-phenyl 2-amino-6-sulfonatonaphthalene; 4-acetamido-4-isothiocyanato-stilbene-2,2'-disulfonic acid; pyrene-3-sulfonic acid; 2-toluidinonaphthalene-6-sulfonate; N-phenyl, N-methyl 2-aminoaphthalene-6-sulfonate; ethidium bromide; stebrine; auromine-0,2-(9'-anthroyl)palmitate; dansyl phosphatidylethanolamine; N,N'-dioctadecyl oxacarbocyanine; N,N'-dihexyl oxacarbocyanine; merocyanine, 4-(3'pyrenyl)butyrate; d-3-aminodesoxy-equilenin; 12-(9'-anthroyl)stearate; 2-methylantracene; 9-vinyanthracene; 2,2'-(vinylene-p-phenylene)bisbenzoxazole; p-bis(2-(4-methyl-5-phenyl-oxazolyl))benzene; 6-dimethylamino-1,2-benzophenazin; retinol; bis(3'-aminopyridinium) 1,10-decandiyl diiodide; sulfonaphthylhydrazone of

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hellibrienin; chlorotetracycline; N-(7-dimethylamino-4-methyl-2-oxo-3-

chromenyl)maleimide; N-p-(2-benzimidazolyl)-phenylmaleimide; N-(4-fluoranthyl)maleimide; bis(homovanillic acid); resazarin; 4-chloro-7-nitro-2,1,3-benzooxadiazole; merocyanine 540; resorufin; rose bengal; and 2,4-diphenyl-3(2H)-furanone.

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Desirably, fluorescers should absorb light above about 300 nm, preferably about 350 nm, and more preferably above about 400 nm, usually emitting at wavelengths greater than about 10 nm higher than the wavelength of the light absorbed. It should be noted that the absorption and emission characteristics of the bound dye may differ from the unbound dye. Therefore, when referring to the various wavelength ranges and characteristics of the dyes, it is intended to indicate the dyes as employed and not the dye which is unconjugated and characterized in an arbitrary solvent.

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Fluorescers are generally preferred because by irradiating a fluorescer with light, one can obtain a plurality of emissions. Thus, a single label can provide for a plurality of measurable events.

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Detectable signal may also be provided by chemiluminescent and bioluminescent sources. Chemiluminescent sources include a compound which becomes electronically excited by a chemical reaction and may then emit light which serves as the detectible signal or donates energy to a fluorescent acceptor. A diverse number of families of compounds have been found to provide chemiluminescence under a variety of conditions. One family of compounds is 2,3-dihydro-1,4-phthalazinedione. The most popular compound is luminol, which is the 5-amino compound. Other members of the family include the 5-amino-6,7,8-trimethoxy- and the dimethylaminoxalbenz analog. These compounds can be made to luminesce with alkaline hydrogen peroxide or calcium hypochlorite and base. Another family of compounds is the 2,4,5-triphenylimidazoles, with lophine as the common name for the parent product. Chemiluminescent analogs include para-dimethylamino and methoxy substituents. Chemiluminescence may also be obtained with oxalates, usually oxalyl active esters, e.g., p-nitrophenyl and a peroxide, e.g., hydrogen peroxide, under basic conditions. Alternatively, luciferins may be used in conjunction with luciferase or lucigenins to provide bioluminescence.

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Spin labels are provided by reporter molecules with an unpaired electron spin which

can be detected by electron spin resonance (ESR) spectroscopy. Exemplary spin labels include organic free radicals, transitional metal complexes, particularly vanadium, copper, iron, and manganese, and the like. Exemplary spin labels include nitroxide free radicals.

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### **Fragmentation**

In addition, amplified sequences may be subjected to other post amplification treatments. For example, in some cases, it may be desirable to fragment the sequence prior to hybridization with an oligonucleotide array, in order to provide segments which are more readily accessible to the probes, which avoid looping and/or hybridization to multiple probes. Fragmentation of the nucleic acids may generally be carried out by physical, chemical or enzymatic methods that are known in the art.

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### **Sample Analysis**

Following the various sample preparation operations, the sample will generally be subjected to one or more analysis operations. Particularly preferred analysis operations include, e.g. sequence based analyses using an oligonucleotide array and/or size based analyses using, e.g. microcapillary array electrophoresis.

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### **Capillary Electrophoresis**

In some embodiments it may be desirable to provide an additional, or alternative means for analyzing the nucleic acids from the sample

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Microcapillary array electrophoresis generally involves the use of a thin capillary or channel which may or may not be filled with a particular separation medium.

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Electrophoresis of a sample through the capillary provides a size based separation profile for the sample. Microcapillary array electrophoresis generally provides a rapid method for size based sequencing, PCR product analysis and restriction fragment

sizing. The high surface to volume ratio of these capillaries allows for the application

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of higher electric fields across the capillary without substantial thermal variation across the capillary, consequently allowing for more rapid separations. Furthermore, when combined with confocal imaging methods these methods provide sensitivity in the range of attomoles, which is comparable to the sensitivity of radioactive sequencing methods.

In many capillary electrophoresis methods, the capillaries e.g. fused silica capillaries or channels etched, machined or molded into planar substrates, are filled with an appropriate separation/sieving matrix. Typically, a variety of sieving matrices are known in the art may be used in the microcapillary arrays. Examples of such matrices include, e.g. hydroxyethyl cellulose, polyacrylamide and agarose. Gel matrices may be introduced and polymerized within the capillary channel. However, in some cases this may result in entrapment of bubbles within the channels which can interfere with sample separations. Accordingly, it is often desirable to place a preformed separation matrix within the capillary channel(s), prior to mating the planar elements of the capillary portion. Fixing the two parts, e.g. through sonic welding, permanently fixes the matrix within the channel. Polymerization outside of the channels helps to ensure that no bubbles are formed. Further, the pressure of the welding process helps to ensure a void-free system.

In addition to its use in nucleic acid "fingerprinting" and other sized based analyses the capillary arrays may also be used in sequencing applications. In particular, gel based sequencing techniques may be readily adapted for capillary array electrophoresis.

#### **Expression products**

In addition to detection of mRNA or as the sole detection method expression products from the genes discussed above may be detected as indications of the biological condition of the tissue. Expression products may be detected in either the tissue sample as such, or in a body fluid sample, such as blood, serum, plasma, faeces, mucus, sputum, cerebrospinal fluid, and/or urine of the individual.

The expression products, peptides and proteins, may be detected by any suitable technique known to the person skilled in the art.

In a preferred embodiment the expression products are detected by means of specific antibodies directed to the various expression products, such as immunofluorescent and/or immunohistochemical staining of the tissue.

Immunohistochemical localization of expressed proteins may be carried out by immunostaining of tissue sections from the single tumors to determine which cells expressed the protein encoded by the transcript in question. The transcript levels may be used to select a group of proteins supposed to show variation from sample to sample making a rough correlation between the level of protein detected and the intensity of the transcript on the microarray possible.

For example sections may be cut from paraffin-embedded tissue blocks, mounted, and deparaffinized by incubation at 80 °C for 10 min. followed by immersion in heated oil at 60° C for 10 min. (Estisol 312, Estichem A/S, Denmark) and rehydration. Antigen retrieval is achieved in TEG (TrisEDTA-Glycerol) buffer using microwaves at 900 W. The tissue sections may be cooled in the buffer for 15 min before a brief rinse in tap water. Endogenous peroxidase activity is blocked by incubating the sections with 1% H2O2 for 20 min. followed by three rinses in tap water, 1 min each. The sections may then be soaked in PBS buffer for 2 min. The next steps can be modified from the descriptions given by Oncogene Science Inc., in the Mouse Immunohistochemistry Detection System, XHCO1 (UniTect, Uniondale, NY, USA). Briefly, the tissue sections are incubated overnight at 4° C with primary antibody (against beta-2 microglobulin (Dako), cytokeratin 8, cystatin-C (both from Europa, US), junB, CD59, E-cadherin, apo-E, cathepsin E, vimentin, IGFII (all from Santa Cruz), followed by three rinses in PBS buffer for 5 min each. Afterwards, the sections are incubated with biotinylated secondary antibody for 30 min, rinsed three times with PBS buffer and subsequently incubated with ABC (avidin-biotinylated horseradish peroxidase complex) for 30 min. followed by three rinses in PBS buffer.

Staining may be performed by incubation with AEC (3-amino-ethylcarbazole) for 10 min. The tissue sections are counter stained with Mayers hematoxylin, washed in tap water for 5 min. and mounted with glycerol-gelatin. Positive and negative controls may be included in each staining round with all antibodies.

In yet another embodiment the expression products may be detected by means of conventional enzyme assays, such as ELISA methods.



Furthermore, the expression products may be detected by means of peptide/protein chips capable of specifically binding the peptides and/or proteins assessed. Thereby an expression pattern may be obtained.

## 5     **Assay**

Thus, in a further aspect the invention relates to an assay for determining an expression pattern of a bladder cell, comprising at least a first marker and/or a second marker, wherein the first marker is capable of detecting a gene from a first gene group as defined above, and/or the second marker is capable of detecting a gene  
10     from a second gene group as defined above, correlating the first expression level and/or the second expression level to a standard level of the assessed genes to determine the presence or absence of a biological condition in the animal tissue. The marker(s) are preferably specifically detecting a gene as identified herein.

15     In another embodiment the assay comprises at least two markers for each gene group.

As discussed above the marker may be any nucleotide probe, such as a DNA, RNA, PNA, or LNA probe capable of hybridising to mRNA indicative of the expression  
20     level. The hybridisation conditions are preferably as described below for probes. In another embodiment the marker is an antibody capable of specifically binding the expression product in question.

## **Detection**

25     Patterns can be compared manually by a person or by a computer or other machine. An algorithm can be used to detect similarities and differences. The algorithm may score and compare, for example, the genes which are expressed and the genes which are not expressed. Alternatively, the algorithm may look for changes in intensity of expression of a particular gene and score changes in intensity between  
30     two samples. Similarities may be determined on the basis of genes which are expressed in both samples and genes which are not expressed in both samples or on the basis of genes whose intensity of expression are numerically similar.

Generally, the detection operation will be performed using a reader device external to the diagnostic device. However, it may be desirable in some cases to incorporate the data gathering operation into the diagnostic device itself.

- 5 The detection apparatus may be a fluorescence detector, or a spectroscopic detector, or another detector.

Although hybridization is one type of specific interaction which is clearly useful for use in this mapping embodiment antibody reagents may also be very useful.

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#### Data Gathering and Analysis

- Gathering data from the various analysis operations, e.g. oligonucleotide and/or microcapillary arrays will typically be carried out using methods known in the art. For example, the arrays may be scanned using lasers to excite fluorescently labeled targets that have hybridized to regions of probe arrays mentioned above, which can then be imaged using charged coupled devices ("CCDs") for a wide field scanning of the array. Alternatively, another particularly useful method for gathering data from the arrays is through the use of laser confocal microscopy which combines the ease and speed of a readily automated process with high resolution detection.

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Following the data gathering operation, the data will typically be reported to a data analysis operation. To facilitate the sample analysis operation, the data obtained by the reader from the device will typically be analyzed using a digital computer.

- Typically, the computer will be appropriately programmed for receipt and storage of the data from the device, as well as for analysis and reporting of the data gathered, i.e., interpreting fluorescence data to determine the sequence of hybridizing probes, normalization of background and single base mismatch hybridizations, ordering of sequence data in SBH applications, and the like.

- 30 It is an object of the present invention to provide a biological sample which may be classified or characterized by analyzing the pattern of specific interactions mentioned above. This may be applicable to a cell or tissue type, to the messenger RNA population expressed by a cell to the genetic content of a cell, or to virtually any sample which can be classified and/or identified by its combination of specific molecular properties.
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**Pharmaceutical composition**

The invention also relates to a pharmaceutical composition for treating a biological condition, such as bladder tumors.

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In one embodiment the pharmaceutical composition comprises one or more of the peptides being expression products as defined above. In a preferred embodiment, the peptides are bound to carriers. The peptides may suitably be coupled to a polymer carrier, for example a protein carrier, such as BSA. Such formulations are well-known to the person skilled in the art.

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The peptides may be suppressor peptides normally lost or decreased in tumor tissue administered in order to stabilise tumors towards a less malignant stage. In another embodiment the peptides are onco-peptides capable of eliciting an immune response towards the tumor cells.

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In another embodiment the pharmaceutical composition comprises genetic material, either genetic material for substitution therapy, or for suppressing therapy as discussed below.

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In a third embodiment the pharmaceutical composition comprises at least one antibody produced as described above.

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In the present context the term pharmaceutical composition is used synonymously with the term medicament. The medicament of the invention comprises an effective amount of one or more of the compounds as defined above, or a composition as defined above in combination with pharmaceutically acceptable additives. Such medicament may suitably be formulated for oral, percutaneous, intramuscular, intravenous, intracranial, intrathecal, intracerebroventricular, intranasal or pulmonal administration. For most indications a localised or substantially localised application is preferred.

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Strategies in formulation development of medicaments and compositions based on the compounds of the present invention generally correspond to formulation strategies for any other protein-based drug product. Potential problems and the guidance

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required to overcome these problems are dealt with in several textbooks, e.g. "Therapeutic Peptides and Protein Formulation. Processing and Delivery Systems", Ed. A.K. Banga, Technomic Publishing AG, Basel, 1995.

- 5       Injectables are usually prepared either as liquid solutions or suspensions, solid forms suitable for solution in, or suspension in, liquid prior to injection. The preparation may also be emulsified. The active ingredient is often mixed with excipients which are pharmaceutically acceptable and compatible with the active ingredient. Suitable excipients are, for example, water, saline, dextrose, glycerol, ethanol or the like, and combinations thereof. In addition, if desired, the preparation may contain 10       minor amounts of auxiliary substances such as wetting or emulsifying agents, pH buffering agents, or which enhance the effectiveness or transportation of the preparation.
- 15       Formulations of the compounds of the invention can be prepared by techniques known to the person skilled in the art. The formulations may contain pharmaceutically acceptable carriers and excipients including microspheres, liposomes, microcapsules and nanoparticles.
- 20       The preparation may suitably be administered by injection, optionally at the site, where the active ingredient is to exert its effect. Additional formulations which are suitable for other modes of administration include suppositories, and in some cases, oral formulations. For suppositories, traditional binders and carriers include polyalkylene glycols or triglycerides. Such suppositories may be formed from mixtures 25       containing the active ingredient(s) in the range of from 0.5% to 10%, preferably 1-2%. Oral formulations include such normally employed excipients as, for example, pharmaceutical grades of mannitol, lactose, starch, magnesium stearate, sodium saccharine, cellulose, magnesium carbonate, and the like. These compositions take the form of solutions, suspensions, tablets, pills, capsules, sustained release formulations or powders and generally contain 10-95% of the active ingredient(s), preferably 30       25-70%.

The preparations are administered in a manner compatible with the dosage formulation, and in such amount as will be therapeutically effective. The quantity to be administered depends on the subject to be treated, including, e.g. the weight and age 35

of the subject, the disease to be treated and the stage of disease. Suitable dosage ranges are of the order of several hundred  $\mu\text{g}$  active ingredient per administration with a preferred range of from about 0.1  $\mu\text{g}$  to 1000  $\mu\text{g}$ , such as in the range of from about 1  $\mu\text{g}$  to 300  $\mu\text{g}$ , and especially in the range of from about 10  $\mu\text{g}$  to 50  $\mu\text{g}$ . Administration may be performed once or may be followed by subsequent administrations. The dosage will also depend on the route of administration and will vary with the age and weight of the subject to be treated. A preferred dosis would be in the interval 30 mg to 70 mg per 70 kg body weight.

Some of the compounds of the present invention are sufficiently active, but for some of the others, the effect will be enhanced if the preparation further comprises pharmaceutically acceptable additives and/or carriers. Such additives and carriers will be known in the art. In some cases, it will be advantageous to include a compound, which promote delivery of the active substance to its target.

In many instances, it will be necessary to administrate the formulation multiple times. Administration may be a continuous infusion, such as intraventricular infusion, or administration in more doses such as more times a day, daily, more times a week, weekly, etc.

### **Vaccines**

In a further embodiment the present invention relates to a vaccine for the prophylaxis or treatment of a biological condition comprising at least one expression product from at least one gene said gene being expressed as defined above.

The term vaccines is used with its normal meaning, i.e. preparations of immunogenic material for administration to induce in the recipient an immunity to infection or intoxication by a given infecting agent. Vaccines may be administered by intravenous injection or through oral, nasal and/or mucosal administration. Vaccines may be either simple vaccines prepared from one species of expression products, such as proteins or peptides, or a variety of expression products, or they may be mixed vaccines containing two or more simple vaccines. They are prepared in such a manner as not to destroy the immunogenic material, although the methods of preparation vary, depending on the vaccine.

The enhanced immune response achieved according to the invention can be attributable to e.g. an enhanced increase in the level of immunoglobulins or in the level of T-cells including cytotoxic T-cells will result in immunisation of at least 50% of individuals exposed to said immunogenic composition or vaccine, such as at least 55%,  
5 for example at least 60%, such as at least 65%, for example at least 70%, for example at least 75%, such as at least 80%, for example at least 85%, such as at least 90%, for example at least 92%, such as at least 94%, for example at least 96%,  
such as at least 97%, for example at least 98%, such as at least 98.5%, for example at least 99%, for example at least 99.5% of the individuals exposed to said immunogenic composition or vaccine are immunised.  
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Compositions according to the invention may also comprise any carrier and/or adjuvant known in the art including functional equivalents thereof. Functionally equivalent carriers are capable of presenting the same immunogenic determinant in essentially the same steric conformation when used under similar conditions. Functionally equivalent adjuvants are capable of providing similar increases in the efficacy of the composition when used under similar conditions.  
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### Therapy

20 The invention further relates to a method of treating individuals suffering from the biological condition in question, in particular for treating a bladder tumor.

In one embodiment the invention relates to a method of substitution therapy, i.e. administration of genetic material generally expressed in normal cells, but lost or  
25 decreased in biological condition cells (tumor suppressors). Thus, the invention relates to a method for reducing cell tumorigenicity or malignancy of a cell, said method comprising

obtaining at least one gene selected from genes being expressed in an amount two-  
30 fold higher in normal cells than the amount expressed in said tumor cell(tumor suppressors),

introducing said at least one gene into the tumor cell in a manner allowing expression of said gene(s).

The at least one gene is preferably selected individually from genes comprising a sequence as identified below

RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
RC_H42123_at	yo61a11.s1 Homo sapiens cDNA clone 182396 3'.
RC_Z39200_at	H. sapiens partial cDNA sequence; clone c-13f02.
RC_N21687_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.
Y13645_at	Homo sapiens mRNA for uroplakin II.
RC_N98461_at	zb86b03.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310445 3'.
RC_W92449_at	zd99d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 357619 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.
RC_T40767_at	ya11a06.s1 Homo sapiens cDNA clone 61138 3'.
RC_T51972_at	yb29c05.s1 Homo sapiens cDNA clone 72584 3'.
RC_AA286862_at	zs58b06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701651 3'.
RC_N29764_at	yw91b09.s1 Homo sapiens cDNA clone 259577 3'.
AA428172_f_at	zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.
RC_H02265_at	yj35d05.s1 Homo sapiens cDNA clone 150729 3'.
RC_W44745_at	zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.
RC_R91819_at	yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.
AA464468_at	zx84d05.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810441 5'.
RC_AA188647_at	zp78e01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626328 3' similar to TR:G998813 G998813 TIF1. [1]

RC_AA405832_at	zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to TR:G780241 G780241 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. ;.
RC_W37778_f_at	zc13b12.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.t3 LTR2 repetitive element ;.
AF010126_at	Homo sapiens breast cancer-specific protein 1 (BCSG1) mRNA, complete cds.
N36432_at	yx83a05.r1 Homo sapiens cDNA clone 268304 5'.
RC_AA236533_s_at	zr74c04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669126 3' similar to gb:S69002 ECOTROPIC VIRUS INTEGRATION 1 SITE PROTEIN (HUMAN);.
RC_AA293163_at	zt55e05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726272 3'.
RC_AA196790_at	zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.
RC_AA253220_at	zr53g12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 667174 3'.
RC_AA100437_at	zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.
RC_AA293300_s_at	zt28d03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.
RC_Z39652_at	H. sapiens partial cDNA sequence; clone c-1fg03.
M63509_s_at	Human glutathione transferase M2 (GSTM2) mRNA, complete cds
RC_Z39842_at	H. sapiens partial cDNA sequence; clone c-1ke11.
RC_N23319_at	yx78e10.s1 Homo sapiens cDNA clone 267882 3'.
RC_AA278817_at	zs78d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703605 3'.
L20773_at	Homo sapiens mRNA in the region near the btk gene involved in a-gamma-globulinemia
RC_R69276_at	yi44h05.s1 Soares placenta Nb2HP Homo sapiens cDNA clone 142137 3'.
RC_F02641_at	H. sapiens partial cDNA sequence; clone c-15d02.



RC_AA424791_at	zw03a04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 768174 3' similar to contains Alu repetitive element;.
RC_R39869_at	yf63b06.s1 Homo sapiens cDNA clone 26725 3'.
RC_AA482224_f_at	ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.
RC_AA025277_at	ze76f02.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364923 3' similar to contains Alu repetitive element;contains element LTR4 repetitive element ;.
AA482319_f_at	ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.
RC_AA001045_at	ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.
RC_AA130645_s_at	zo10f03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 567293 3' similar to SW:NI2M_BOVIN Q02369 NADH-UBIQUINONE OXIDOREDUCTASE B22 SUBUNIT ;.
RC_AA291659_at	zt37c02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724514 3'.
AA046768_at	zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'.
H07011_at	yl81e01.r1 Homo sapiens cDNA clone 44466 5'.
RC_AA293533_i_at	zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);.
RC_AA100649_at	zn63g10.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 562914 3' similar to SW:LCFA_ECOLI P29212 LONG-CHAIN-FATTY-ACID--COA LIGASE ;.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA180054_at	zp40g07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 611964 3'.
AA263032_s_at	PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
W69310_at	zd46f07.r1 Soares fetal heart NbHH19W Homo sapiens cDNA

	clone 343717 5'.
RC_AA219653_at	zr05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.
RC_AA457235_at	aa91c07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838668 3'.
RC_AA455967_at	aa16h10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813475 3'.
N27670_at	yx51a09.r1 Homo sapiens cDNA clone 265240 5'.
RC_N80152_at	za65e02.s1 Homo sapiens cDNA clone 297434 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA147218_s_at	zo64g03.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591700 3'.
C01139_at	HUMGS0007818, Human Gene Signature, 3'-directed cDNA sequence.
AA285284_at	PMY0691 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.
RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA479096_at	zv17e07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753924 3'.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.
RC_T03927_at	seq2490 Homo sapiens cDNA clone 3HFLSK20-87 3'.
AA314457_at	EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.
RC_AA191524_at	zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens

	cDNA clone 627295 3'.
RC_N29740_at	yw90b12.s1 Homo sapiens cDNA clone 259487 3'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.
RC_AA404487_at	zw38a06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772306 3'.
RC_H16666_at	ym26a10.s1 Homo sapiens cDNA clone 49155 3'.
RC_AA406197_at	zv24d11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754581 3'.
RC_H09594_at	yl97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PRO-STATIC ACID PHOSPHATASE PRECURSOR ;.
RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_AA293533_f_at	zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);.
RC_AA398197_at	zt59a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'.
AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
RC_AA236356_at	zr54a11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 667196 3'.
W92678_at	zd92a04.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 356910 5' similar to contains element LTR3 repetitive element ;.
RC_N63332_at	yz33d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element;.
C16281_s_at	Human aorta cDNA 5'-end GEN-259H09.
RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.

H88035_s_at	yw20e07.r1 Homo sapiens cDNA clone 252804 5'.
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_R45698_at	yg45h12.s1 Homo sapiens cDNA clone 35838 3'.
RC_AA236542_at	zr75g11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669284 3'.
AA376875_at	EST89388 Small intestine I Homo sapiens cDNA 5' end similar to monoamine oxidase A.
RC_R43365_at	yg15g06.s1 Homo sapiens cDNA clone 32365 3'.
RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_AA057620_at	zf15h06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377051 3'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.
RC_AA598872_at	ae37b10.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897979 3'.
RC_AA147646_s_at	zl52g06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505594 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.
RC_N54365_at	yv39c06.s1 Homo sapiens cDNA clone 245098 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
AA046593_at	zk62g01.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487440 5'.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.
RC_AA256273_at	zr81c12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682102 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.

RC_AA086005_at	zl84c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'.
RC_AA479885_at	zw44a07.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772884 3'.
AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HY-POTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
R15268_at	yf89f02.r1 Homo sapiens cDNA clone 29665 5'.
RC_AA443658_at	zw86a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783834 3' similar to TR:G438639 G438639 LAMIN B RECEPTOR. [1] ;.
RC_H16790_at	ym39b01.s1 Homo sapiens cDNA clone 50559 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
AB002321_at	Human mRNA for KIAA0323 gene, partial cds.
RC_Z38810_at	H. sapiens partial cDNA sequence; clone c-0qb09.
AC000115_cds1_at	WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone. 682251 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
AA309880_at	EST180743 Jurkat T-cells V Homo sapiens cDNA 5' end.
RC_R43812_at	yg21a08.s1 Homo sapiens cDNA clone 32940 3'.
RC_AA425636_at	zv47a04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756750 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_AA279420_at	zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.

RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
AF007216_at	Homo sapiens sodium bicarbonate cotransporter (HNBC1) mRNA, complete cds.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
D79601_f_at	Human aorta cDNA 5'-end GEN-286G10.
RC_N30856_at	yw70f05.s1 Homo sapiens cDNA clone 257601 3'.
L29218_s_at	Homo sapiens clk2 mRNA, complete cds
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPI- DERMAL GROWTH FACTOR RECEPTOR KINASE SUB- STRATE. ;.
AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
RC_AA252765_at	zs27d03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.
RC_W46846_at	zc36a04.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324366 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.
RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_N52565_at	yv36d12.s1 Homo sapiens cDNA clone 244823 3'.
RC_W32506_s_at	zc06a02.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321482 3'.
RC_AA255539_at	zr85c04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682470 3'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.
AA091278_at	cchn2404.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.

AA091412_s_at	II2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA046865_at	zf12b09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376697 5'.
AA324825_at	EST27743 Cerebellum II Homo sapiens cDNA 5' end.
RC_AA454840_s_at	zx79d09.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 809969 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_AA402484_at	zt65c03.s1 Soares testis NHT Homo sapiens cDNA clone 727204 3'.
W26883_at	15h10 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
RC_AA121360_s_at	zn77a05.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564176 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.
H18718_at	ym45b05.r1 Homo sapiens cDNA clone 51043 5' similar to contains Alu repetitive element;.
RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_R67996_at	yi04c10.s1 Homo sapiens cDNA clone 138258 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_F11115_at	H. sapiens partial cDNA sequence; clone c-33a10.
RC_R08871_at	yf21e07.s1 Homo sapiens cDNA clone 127524 3'.
RC_AA224324_at	zr12e05.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648608 3'.

RC_AA399226_at	zt50c01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725760 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.
RC_AA464240_s_at	zx81a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810128 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
RC_AA029288_at	zk10b03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470093 3' similar to PIR:H45193 H45193 zinc finger protein ZNF65 ;.
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR ;.
J04813_s_at	Human cytochrome P450 PCN3 gene, complete cds
RC_AA465093_at	aa32h08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815007 3'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA256680_at	zr82h09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682241 3'.
AA147510_s_at	zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
R78119_at	yi80c10.r1 Homo sapiens cDNA clone 145554 5'.
RC_Z38407_s_at	H. sapiens partial cDNA sequence; clone c-0ac03.
RC_AA287107_s_at	zs58f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701711 3'.
RC_AA287042_at	zs57e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701604 3'.



AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA402622_at	zu47g07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741180 3'.
RC_AA436628_at	zw55e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773994 3'.
RC_AA282138_at	zt02a10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711930 3'.
AA045870_at	zk75a04.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488622 5'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8. [1];.
RC_AA609210_at	af12f04.s1 Soares testis NHT Homo sapiens cDNA clone 1031455 3'.
RC_AA133469_at	zo13e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 586796 3'.
R22139_at	yh25b11.r1 Homo sapiens cDNA clone 130749 5'.
AA305116_at	EST176117 Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA026397_at	ze92d07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366445 3'.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA

	clone 301487 5'.
H89575_s_at	yw28c11.r1 Homo sapiens cDNA clone 253556 5'.
RC_AA251003_at	zs07g11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684548 3'.
RC_AA279408_at	zs84h09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704225 3'.
RC_AA281760_at	zt07g10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712482 3' similar to TR:G808826 G808826 HYPOTHE- TICAL 25.7 KD PROTEIN. ;.
AB002381_at	Human mRNA for KIAA0383 gene, partial cds.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.
RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
T94506_at	ye36a05.r1 Homo sapiens cDNA clone 119792 5'.
D55869_s_at	Human fetal brain cDNA 5'-end GEN-404F02.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds
U77942_at	Human syntaxin 7 mRNA, complete cds.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.
RC_AA194045_at	zr38c08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665678 3'.
RC_AA025104_at	ze78f05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365121 3'.
RC_AA242822_at	zr65e09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668296 3'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA489383_at	ab41e08.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 843398 3'.
RC_AA621188_at	zu81a08.s1 Soares testis NHT Homo sapiens cDNA clone

	744374 3'.
RC_AA486182_at	ab35a01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842760 3'.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
RC_AA024866_at	ze79b09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365177 3'.
RC_AA450373_at	zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.
N78483_at	yz78d07.r1 Homo sapiens cDNA clone 289165 5'.
RC_AA281245_at	zs94d07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705133 3'.
W52431_at	zc45b12.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN. [2] PIR:S07807 ;.
RC_AA446597_at	zw84f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783673 3'.
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.
X73501_at	H.sapiens gene for cytokeratin 20
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;.

or from a sequence as identified below

AB002370_at	Human mRNA for KIAA0372 gene, complete cds.
AF000546_at	Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.
H43922_at	yo70c03.r1 Homo sapiens cDNA clone 183268 5'.
H44269_at	yp17b05.r1 Homo sapiens cDNA clone 187665 5' similar to contains Alu repetitive element;.
H88706_s_at	yw23e08.r1 Homo sapiens cDNA clone 253094 5'.

L25880_s_at	Homo sapiens epoxide hydrolase (EPHX) gene, complete cds
N81162_at	yw36d01.r1 Homo sapiens cDNA clone 254305 5'.
RC_F10381_s_at	H. sapiens partial cDNA sequence; clone c-3ec07.
RC_H54558_at	EST00018 HE6W Homo sapiens cDNA clone HE6WCR108 3'.
RC_H58692_s_at	yr20g08.s1 Homo sapiens cDNA clone 205886 3' similar to SP:FTDH_RAT P28037 FORMYLTETRAHYDROFOLATE DEHYDROGENASE ;.
RC_N20047_at	yx28d06.s1 Homo sapiens cDNA clone 263051 3'.
RC_N38810_at	yv28e04.s1 Homo sapiens cDNA clone 244062 3'.
RC_R46497_at	yg51h01.s1 Homo sapiens cDNA clone 36305 3'.
RC_R55001_at	yj76a08.s1 Homo sapiens cDNA clone 154646 3'.
RC_T29986_s_at	EST10130 Homo sapiens cDNA 3' end similar to None.
RC_T30214_at	EST12901 Homo sapiens cDNA 3' end similar to None.
RC_T40438_at	ya01c07.s2 Homo sapiens cDNA clone 60204 3'.
RC_W51910_at	zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.
RC_W73949_at	zd71f09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 346121 3'.
RC_W86375_s_at	zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.
RC_Z38289_at	H. sapiens partial cDNA sequence; clone c-05e04.
RC_Z38807_s_at	H. sapiens partial cDNA sequence; clone c-0qb04.
RC_Z39599_at	H. sapiens partial cDNA sequence; clone c-1ed10.
RC_AA025351_at	ze74h03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364757 3' similar to contains OFR.t1 OFR repetitive element ;.
RC_AA136474_at	zl01f04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491071 3'.
RC_AA136611_at	zk99b02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490923 3'.
RC_AA233375_at	zr48f07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone

at	666661 3'.
RC_AA235621_s_at	zt36c05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724424 3'.
RC_AA253331_at	zr72g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668978 3'.
RC_AA393793_at	zv64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758394 3'.
RC_AA419547_at	zv04a05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752624 3'.
RC_AA421100_at	zu27d11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739221 3'.
RC_AA443277_at	zw87f06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783971 3'.
RC_AA446570_at	zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.
RC_AA447123_at	zw93c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784512 3'.
RC_AA449343_at	zx06g09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785728 3'.
RC_AA456016_at	aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.
RC_AA479299_at	zv21f04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754303 3'.
RC_AA479350_at	zv17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ;.
U85707_at	Human leukemogenic homolog protein (MEIS1) mRNA, complete cds
U94831_at	Human multispinning membrane protein mRNA, complete cds. /gb=U94831 /ntype=RNA
W27827_at	38c8 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
W81301_at	zd85a12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347422 5'.

Y12711_at	H.sapiens mRNA for putative progesterone binding protein
AA074407_at	zm15c08.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 525710 5'.
AA091017_at	yy1646.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA104023_at	l7134.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA171913_at	zo95d05.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594633 5'.
AA195678_at	zr32h05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 665145 5'.
AA227678_at	zr55e05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 667328 5'.
AA247204_at	csg0306.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA479995_at	zv18b05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753969 5'.

or from a sequence as identified below

RC_H14633_at	yl26e06.s1 Homo sapiens cDNA clone 159394 3'.
RC_N62506_at	yz74d02.s1 Homo sapiens cDNA clone 288771 3'.
RC_N70481_at	za74g10.s1 Homo sapiens cDNA clone 298338 3'.
RC_N73988_at	za57b06.s1 Homo sapiens cDNA clone 296627 3'.
RC_T53404_at	ya88g06.s1 Homo sapiens cDNA clone 68794 3'.
RC_Z38149_at	H. sapiens partial cDNA sequence; clone c-01a09.
RC_Z38849_at	H. sapiens partial cDNA sequence; clone c-0rb11.
RC_AA037409_at	zc03h03.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321269 3'.
RC_AA084318_at	zn18b04.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547759 3'.
RC_AA126419_at	zk94d04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490471 3'.
RC_AA128407_at	zm24d04.s1 Stratagene pancreas (#937208) Homo sapiens

at	cDNA clone 526567 3'.
RC_AA173430_at	zp02e08.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595238 3'.
RC_AA398104_at	zt58d03.s1 Soares testis NHT Homo sapiens cDNA clone 726533 3'.
RC_AA399414_at	zt50e07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725796 3'.
RC_AA431479_at	zw72f05.s1 Soares testis NHT Homo sapiens cDNA clone 781761 3'.
RC_AA436471_at	zv08e05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753056 3'.
RC_AA449455_at	zx05e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785610 3' similar to contains Alu repetitive element;.
RC_AA458899_at	zx88d07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810829 3'.
RC_AA463630_s_at	zx98g09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811840 3'.
RC_AA489009_at	aa54d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824757 3'.
W37319_at	zc11f08.r1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322023 5'.

or from a sequence as identified below

yx16e10.r1 Homo sapiens cDNA clone 261930 5'.	N24990_s_at
yf41e08.r1 Homo sapiens cDNA clone 129446 5' similar to SP:A46661 A46661 LEUKOTRIENE B4 OMEGA-HYDROXYLASE, P-450LTB OMEGA=CYTOCHROME P-450 SUPERFAMILY MEMBER - ;.	R11267_at
yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.	RC_H52937_at
yr89e02.s1 Homo sapiens cDNA clone 212474 3'.	RC_H69547_at
yu73c12.s1 Homo sapiens cDNA clone 239446 3'.	RC_H70047_at
yx99c11.s1 Homo sapiens cDNA clone 269876 3'.	RC_N24879_at

yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	RC_N66312_at
yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	RC_R22189_at
yg44f05.s1 Homo sapiens cDNA clone 35270 3'.	RC_R45582_at
yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	RC_R53457_at
yi49g10.s1 Homo sapiens cDNA clone 142626 3'.	RC_R70903_at
zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	RC_AA054321_s_at
zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	RC_AA099820_at
zl17g05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 3'.	RC_AA127238_at
zo64h02.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591699 3'.	RC_AA147224_at
zq12e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629498 3'.	RC_AA192765_at
zr33d07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665197 3'.	RC_AA195718_at
zr28b08.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664695 3' similar to gb:L05779 SOLUBLE EPOXIDE HYDROLASE (HUMAN);.	RC_AA232114_s_at
zt07h12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712487 3'.	RC_AA281770_at
zw59e03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774364 3' similar to TR:G1199667 G1199667 PROTEIN KINASE C-BINDING PROTEIN ENIGMA ;.	RC_AA430209_at
zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	RC_AA452410_at
aa39g12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815686 3'.	RC_AA485115_at
zk85e12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489646 5'.	AA099391_s_at
zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CA-THEPSIN ;.	AA131127_at



zp02c06.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595210 5' similar to SW:QRI2_YEAST P43124 HYPOTHETICAL 46.1 KD PROTEIN IN PHO2-POL3 INTERGENIC REGION. [1] ;.	AA173505_at
zt39b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724693 5'.	AA291786_s_at
zu53f10.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741739 5'.	AA402971_s_at

or from a sequence as identified below

Human mRNA for IgG Fc binding protein, complete cds	D84239_at
yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248345 3'.	RC_N54841_at
ya88f04.s1 Homo sapiens cDNA clone 68767 3'.	RC_T53389_s_at
ye30d12.s1 Homo sapiens cDNA clone 119255 3'.	RC_T98227_at
zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	RC_AA215379_at
zr81e12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682126 3'.	RC_AA256485_at
zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;.	RC_AA290679_at
zw46c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773088 3'.	RC_AA425309_at
zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.	RC_AA429655_at
aa90h11.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838629 3' similar to contains Alu repetitive element;.	RC_AA456981_at
zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	RC_AA461174_at
zd27g09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341920 5'.	W61377_at

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In one embodiment at least one gene is introduced into the tumor cell. In another embodiment at least two genes are introduced into the tumor cell.

5 In one aspect of the invention small molecules that either inhibit increased gene expression or their effects or substitute decreased gene expression or their effects, are introduced to the cellular environment or the cells. Application of small molecules to tumor cells may be performed by e.g. local application or intravenous injection or by oral ingestion. Small molecules have the ability to restore function of reduced gene expression in tumor or cancer tissue.

10

In another aspect the invention relates to a therapy whereby genes (increase and/or decrease) generally are correlated to disease are inhibited by one or more of the following methods:

15 A method for reducing cell tumorigenicity or malignancy of a cell, said method comprising

obtaining at least one nucleotide probe capable of hybridising with at least one gene of a tumor cell, said at least one gene being selected from genes being expressed in  
20 an amount at least one-fold lower in normal cells than the amount expressed in said tumor cell, and

introducing said at least one nucleotide probe into the tumor cell in a manner  
allowing the probe to hybridise to the at least one gene, thereby inhibiting  
25 expression of said at least one gene. This method is preferably based on anti-sense technology, whereby the hybridisation of said probe to the gene leads to a down-regulation of said gene.

The down-regulation may of course also be based on a probe capable of hybridising  
30 to regulatory components of the genes in question, such as promoters.

The probes are preferably selected from probes capable of hybridising to a nucleotide sequence comprising a sequence as identified below

Homo sapiens mRNA for CC chemokine, complete cds.
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AB000221_at
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Human fetal brain cDNA 3'-end GEN-097D06.	RC_D60296_at
Human fetal brain cDNA 3'-end GEN-132E11.	RC_D60813_at
yg71a11.s1 Homo sapiens cDNA clone 38542 3'.	RC_R49708_s_at
H. sapiens partial cDNA sequence; clone c-02a08.	RC_Z38182_at
aa38e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815556 3'.	RC_AA456821_at
ae53d05.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3'.	RC_AA608545_at
ae58g12.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 951142 3'.	RC_AA620553_s_at
cp3087.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA095119_at

or from

yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	RC_H20269_at
H. sapiens partial cDNA sequence; clone c-2ea12.	RC_Z40715_at
zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.	RC_AA116036_at
zn92a08.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 565622 3'.	RC_AA133250_at

5 or from a sequence as identified below

Human threonyl-tRNA synthetase mRNA, complete cds	M63180_at
HFBEST-40 Human fetal brain QBoqin2 Homo sapiens cDNA.	N89563_s_at
Human fetal brain cDNA 3'-end GEN-045C11.	RC_D80198_at
H. sapiens partial cDNA sequence; clone c-0kf11.	RC_F01986_f_at
yn51g07.s1 Homo sapiens cDNA clone 171996 3'.	RC_H18997_at
zn76c11.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564116 3' similar to contains Alu repetitive element;	RC_AA101562_at

or from a sequence as identified below

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Ye73c08.s1 Homo sapiens cDNA clone 123374 3'.	RC_R00083_at
yj80e01.s1 Homo sapiens cDNA clone 155064 3'.	RC_R71391_at
Seq2147 Homo sapiens cDNA clone NHB3MK-9 3'.	RC_T23991_at
Yd70f06.s1 Homo sapiens cDNA clone 113603 3' similar to contains Alu repetitive element;.	RC_T79196_at
Zo26a09.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587992 3'.	RC_AA130596_at
Zx89d06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810923 3'.	RC_AA459310_r_at
aa48f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824207 3'.	RC_AA490965_at
Human DNA binding protein homolog (DRX) mRNA, partial cds	U88047_at
Human DSC2 mRNA for desmocollins type 2a and 2b	X56807_at
zi01b10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5'.	AA011479_at
EST112387 Aorta endothelial cells Homo sapiens cDNA 5' end.	AA296821_at

or from a sequence as identified below

zx58c10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446706 5' similar to contains Alu repetitive element;.	AA203639_at
Human prealbumin gene, complete cds.	M11844_at
zq77f02.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;.	RC_AA206042_at
yz03e04.s1 Homo sapiens cDNA clone 281982 3'.	RC_N51097_at
yl70f08.s1 Soares infant brain 1NIB Homo sapiens cDNA clone 43327 3'.	RC_H05527_at
zi05d11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN. ;.	AA115572_s_at

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yj14b12.s1 Homo sapiens cDNA clone 148703 3'.	RC_H12863_at
ab36e04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5'.	AA489287_at
ye49h07.s1 Homo sapiens cDNA clone 121117 3'.	RC_T96383_at
yq98g12.s1 Homo sapiens cDNA clone 203878 3'.	RC_H56453_at
zl03h01.s1 Soares pregnant uterus-NbHPU Homo sapiens cDNA clone 491281 3'.	RC_AA152194_at
H. sapiens partial cDNA sequence; clone c-0ed05.	RC_Z38520_at
yd06g09.s1 Homo sapiens cDNA clone 25061 3' similar to contains Alu repetitive element;.	RC_R38944_at
zo16e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587084 3'.	RC_AA133926_at
za68f06.s1 Homo sapiens cDNA clone 297731 3' similar to gb:X59244 ZINC FINGER PROTEIN 43 (HUMAN);.	RC_N69908_f_at
zo02c02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566498 3' similar to contains Alu repetitive element;.	RC_AA151945_at
SOX5=Sry-related HMG box gene {alternatively spliced} [human, testis, mRNA, 1473 nt]	S83308_at
zv11b06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753299 3'.	RC_AA406570_at
zl67g04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509718 3' similar to contains Alu repetitive element;contains element PTR5 repetitive element ;.	RC_AA058314_at
yr31g12.s1 Homo sapiens cDNA clone 206950 3'.	RC_R98735_at

or from a sequence as identified below

Human mRNA for KIAA0180 gene, partial cds	D80002_at
Similar to none.	D82418_at
Yx59d10.r1 Homo sapiens cDNA clone 266035 5'.	N28843_at
H. sapiens partial cDNA sequence; clone c-12c11.	RC_F02541_at
Yw65f02.s1 Homo sapiens cDNA clone 257115 3'.	RC_N30806_at
Yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;.	RC_R33146_at

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Yf70a09.s1 Homo sapiens cDNA clone 27448 3'.	RC_R40166_at
Yi23g09.s1 Homo sapiens cDNA clone 140128 3'.	RC_R65998_at
Zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3'.	RC_AA027823_at
Zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'.	RC_AA084138_at
Zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'.	RC_AA223902_at
Zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3'.	RC_AA424524_at
Aa65d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825813 3'.	RC_AA505136_at
Zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5'.	AA043223_at

or from a sequence as identified below

H. sapiens partial cDNA sequence; clone c-1pb12.	RC_F03192_at
Zd87g10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347682 3'.	RC_W81552_at
H. sapiens partial cDNA sequence; clone c-10c01.	RC_F02470_at
zc20b06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 322835 3' similar to PIR:S44218 S44218 testin - mouse [1] ;.	RC_W44927_at
yg46b01.s1 Homo sapiens cDNA clone 35626 3'.	RC_R45292_at
yr47b09.s1 Homo sapiens cDNA clone 208409 3' similar to contains Alu repetitive element;contains MER15 repetitive element ;.	RC_H62159_at
yf45a10.s2 Homo sapiens cDNA clone 129786 3'.	RC_R17059_at
ym30c10.s1 Homo sapiens cDNA clone 49795 3'.	RC_H15259_at
29a6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	W26376_at
H.sapiens mRNA for putative carboxylesterase	Y09616_at
zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens	AA425593_at

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cdNA clone 773307 5'.	
zt08e05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712544 3'.	RC_AA279980_at
ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	RC_H14089_at
yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	RC_R46079_f_at
zc17d10.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;.	RC_W15360_at
Human mRNA for retinoic acid receptor-like protein	X52773_at
ze75b05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364785 3' similar to TR:G451330 G451330 STEROL REGULATORY ELEMENT BINDING PROTEIN-2. ;.	RC_AA053886_s_at
zo31a10.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588474 3'.	RC_AA143493_at
Homo sapiens mRNA; expressed sequence tag; clone DKFZphsnu1_1b13, 3' read.	RC_Z98492_at
H. sapiens partial cDNA sequence.	F15201_at
yh10f08.s1 Homo sapiens cDNA clone 42872 3'.	RC_R61883_at
30e12 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	W26505_at
zn53e03.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561916 3'.	RC_AA085676_at
ze55c07.r1 Soares retina N2b4HR Homo sapiens cDNA clo- ne 362892 5' similar to SW:RB14_RAT P35287 RAS- RELATED PROTEIN RAB-14. [1] ;.	AA018804_at
Human class I histocompatibility antigen-like protein mRNA, complete cds.	U22963_at
yf26d08.s1 Homo sapiens cDNA clone 127983 3'.	RC_R09230_at
yi25g01.s1 Homo sapiens cDNA clone 140304 3'.	RC_R67918_at
zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA.	AA402119_at
zn42g07.r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5'.	AA082171_at
yi89d09.r1 Homo sapiens cDNA clone 146417 5'.	R79750_at

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zw80d04.s1 Soares testis NHT Homo sapiens cDNA clone 782503 3'.	RC_AA431773_at
zs97a07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711540 3'.	RC_AA280670_at
EST16378 Aorta endothelial cells, TNF alpha-treated Homo sapiens cDNA 5' end.	AA303711_at
zu64g03.r1 Soares testis NHT Homo sapiens cDNA clone 742804 5'.	AA400361_at
Homo sapiens MDM2-like p53-binding protein (MDMX) mRNA, complete cds.	AF007111_at
aa59c02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825218 5' similar to contains element MIR repetitive element	AA504384_at
K1565F Fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K1565 5' similar to EST(YD54C09.R1 ).	N88108_at
aa20e01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813816 3'.	RC_AA447769_at

or from a sequence as identified below

Ze92h01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366481 3'.	RC_AA026418_at
Human fetal brain cDNA 3'-end GEN-070G07.	RC_D59847_at
Seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3'.	RC_T24099_at
Yh16a10.s1 Homo sapiens cDNA clone 37689 3'.	RC_R59292_at
Zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.	RC_W60582_at
Human 5-lipoxygenase activating protein (FLAP) gene	M63262_at
Yc89d05.s1 Homo sapiens cDNA clone 23443 3'.	RC_R38678_at
Zd29g01.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342096 5'.	W60268_at
Zx80d02.r1 Soares ovary tumor NbHOT Homo sapiens cDNA	AA465016_at

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clone 810051 5' similar to TR:G1020091 G1020091 NEU-ROPSIN. ;contains element LTR3 repetitive element ;.	
Yd83f04.s1 Homo sapiens cDNA clone 114847 3'.	RC_T79842_at
Zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3'.	RC_AA206225_at
Zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3'.	RC_AA449914_at
H. sapiens partial cDNA sequence; clone c-3bh08.	RC_F10211_at
zv41f05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756225 3' similar to TR:G498729 G498729 ZINC FINGER PROTEIN ;.	RC_AA480109_r_at
zl72a06.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510130 3'.	RC_AA053102_s_at
zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;.	RC_AA434113_at
zw62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3'.	RC_AA441791_at
yz42c02.s1 Homo sapiens cDNA clone 285698 3'.	RC_N67583_at
ye47b12.s1 Homo sapiens cDNA clone 120863 3'.	RC_T96077_at
Human mRNA for KIAA0318 gene, partial cds.	AB002316_at
ze10g07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 358620 3'.	RC_W96222_at
Human hemopoietic cell protein-tyrosine kinase (HCK) gene, complete cds, clone lambda-a2/1a	M16591_s_at
yz76b12.s1 Homo sapiens cDNA clone 288959 3'.	RC_N59808_at
H. sapiens partial cDNA sequence; clone c-39g09.	RC_F10040_at
zx62b09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3'.	RC_AA461549_at
zd35d04.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342631 3'.	RC_W68683_at
zn20d05.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3'.	RC_AA084640_at
HUMGS0007858, Human Gene Signature, 3'-directed cDNA	C01169_at

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sequence.	
ab04a05.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3'.	RC_AA491465_at
zd41c07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343212 3'.	RC_W67564_s_at
Human beta-1-adrenergic receptor mRNA, complete cds.	J03019_s_at
yu77b06.s1 Homo sapiens cDNA clone 239795 3'.	RC_H80622_at
yy15h06.s1 Homo sapiens cDNA clone 271355 3'.	RC_N34686_at
yg91d08.s1 Homo sapiens cDNA clone 40992 3'.	RC_R56066_s_at
EST71577 Homo sapiens cDNA 3' end similar to None.	RC_T34611_at
zk15e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470638 3'.	RC_AA031373_s_at
Human mRNA for spi-1 proto-oncogene	X52056_at
yz89g12.r1 Homo sapiens cDNA clone 290278 5'.	N77564_at
HUMGS0003713, Human Gene Signature, 3'-directed cDNA sequence.	C01765_at
ae32d03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3'.	RC_AA496936_at
zk04e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469564 3'.	RC_AA027103_at
yg32c11.s1 Homo sapiens cDNA clone 34089 3'.	RC_R44131_at
yz48f04.s1 Homo sapiens cDNA clone 286303 3'.	RC_N67227_at
ye52f03.s1 Homo sapiens cDNA clone 121373 3'.	RC_T96677_at
zo23g05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587768 3'.	RC_AA134965_i_at
yd87d10.s1 Homo sapiens cDNA clone 115219 3'.	RC_T86600_at
zf51f03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380477 3'.	RC_AA054087_at
zv76b10.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA 5'.	AA444374_at
ys04f01.s1 Homo sapiens cDNA clone 213817 3' similar to gb:J04970 CARBOXYPEPTIDASE M PRECURSOR (HUMAN); contains Alu repetitive element;.	RC_H72357_at
ze37d11.s1 Soares retina N2b4HR Homo sapiens cDNA clo-	RC_AA017045_at

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ne 361173 3'.	
zi09c03.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430276 5'.	AA010324_at
zs38b09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 687449 3'.	RC_AA234743_at
zf20d06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377483 3'.	RC_AA055892_at
zw89g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784178 3'.	RC_AA446650_at
ys80e03.r1 Homo sapiens cDNA clone 221116 5'.	H91747_s_at
zu63c08.r1 Soares testis NHT Homo sapiens cDNA clone 742670 5'.	AA401510_s_at
zd31d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342259 3'.	RC_W61239_at

In another embodiment the probes consists of the sequences identified above.

5 The hybridization may be tested in vitro at conditions corresponding to in vivo conditions. Typically, hybridization conditions are of low to moderate stringency. These conditions favour specific interactions between completely complementary sequences, but allow some non-specific interaction between less than perfectly matched sequences to occur as well. After hybridization, the nucleic acids can be "washed" under moderate or high conditions of stringency to dissociate duplexes that are bound together by some non-specific interaction (the nucleic acids that form these duplexes are thus not completely complementary).

15 As is known in the art, the optimal conditions for washing are determined empirically, often by gradually increasing the stringency. The parameters that can be changed to affect stringency include, primarily, temperature and salt concentration. In general, the lower the salt concentration and the higher the temperature the higher the stringency. Washing can be initiated at a low temperature (for example, room temperature) using a solution containing a salt concentration that is equivalent to or lower than that of the hybridization solution. Subsequent washing can be carried out using progressively warmer solutions having the same salt concentration. 20 As alternatives, the salt concentration can be lowered and the temperature main-

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tained in the washing step, or the salt concentration can be lowered and the temperature increased. Additional parameters can also be altered. For example, use of a destabilizing agent, such as formamide, alters the stringency conditions.

5 In reactions where nucleic acids are hybridized, the conditions used to achieve a given level of stringency will vary. There is not one set of conditions, for example, that will allow duplexes to form between all nucleic acids that are 85% identical to one another; hybridization also depends on unique features of each nucleic acid. The length of the sequence, the composition of the sequence (for example, the  
10 content of purine-like nucleotides versus the content of pyrimidine-like nucleotides) and the type of nucleic acid (for example, DNA or RNA) affect hybridization. An additional consideration is whether one of the nucleic acids is immobilized (for example on a filter).

15 An example of a progression from lower to higher stringency conditions is the following, where the salt content is given as the relative abundance of SSC (a salt solution containing sodium chloride and sodium citrate; 2X SSC is 10-fold more concentrated than 0.2X SSC). Nucleic acids are hybridized at 42°C in 2X SSC/0.1% SDS (sodium dodecylsulfate; a detergent) and then washed in 0.2X SSC/0.1% SDS  
20 at room temperature (for conditions of low stringency); 0.2X SSC/0.1% SDS at 42°C (for conditions of moderate stringency); and 0.1X SSC at 68°C (for conditions of high stringency). Washing can be carried out using only one of the conditions given, or each of the conditions can be used (for example, washing for 10-15 minutes each in the order listed above). Any or all of the washes can be repeated. As mentioned  
25 above, optimal conditions will vary and can be determined empirically.

In another aspect a method of reducing tumorigenicity relates to the use of antibodies against an expression product of a cell from the biological tissue. The antibodies may be produced by any suitable method, such as a method comprising  
30 the steps of

obtaining expression product(s) from at least one gene said gene being expressed as defined above for oncogenes,

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immunising a mammal with said expression product(s) obtaining antibodies against the expression product.

#### **Use**

5 The methods described above may be used for producing an assay for diagnosing a biological condition in animal tissue, or for identification of the origin of a piece of tissue. Further, the methods of the invention may be used for prediction of a disease course and treatment response.

10 Furthermore, the invention relates to the use of a peptide as defined above for preparation of a pharmaceutical composition for the treatment of a biological condition in animal tissue.

15 Furthermore, the invention relates to the use of a gene as defined above for preparation of a pharmaceutical composition for the treatment of a biological condition in animal tissue.

20 Also, the invention relates to the use of a probe as defined above for preparation of a pharmaceutical composition for the treatment of a biological condition in animal tissue.

#### **Gene delivery therapy**

25 The genetic material discussed above for may be any of the described genes or functional parts thereof. The constructs may be introduced as a single DNA molecule encoding all of the genes, or different DNA molecules having one or more genes. The constructs may be introduced simultaneously or consecutively, each with the same or different markers.

30 The gene may be linked to the complex as such or protected by any suitable system normally used for transfection such as viral vectors or artificial viral envelope, liposomes or micellas, wherein the system is linked to the complex.

35 Numerous techniques for introducing DNA into eukaryotic cells are known to the skilled artisan. Often this is done by means of vectors, and often in the form of nucleic acid encapsidated by a (frequently virus-like) proteinaceous coat. Gene deliv-

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ery systems may be applied to a wide range of clinical as well as experimental applications.

5 Vectors containing useful elements such as selectable and/or amplifiable markers, promoter/enhancer elements for expression in mammalian, particularly human, cells, and which may be used to prepare stocks of construct DNAs and for carrying out transfections are well known in the art. Many are commercially available.

10 Various techniques have been developed for modification of target tissue and cells in vivo. A number of virus vectors, discussed below, are known which allow transfection and random integration of the virus into the host. See, for example, Dubensky et al. (1984) Proc. Natl. Acad. Sci. USA 81:7529-7533; Kaneda et al., (1989) Science 243:375-378; Hiebert et al. (1989) Proc. Natl. Acad. Sci. USA 86:3594-3598; Hatzoglu et al., (1990) J. Biol. Chem. 265:17285-17293; Ferry et al. (1991) 15 Proc. Natl. Acad. Sci. USA 88:8377-8381. Routes and modes of administering the vector include injection, e.g intravascularly or intramuscularly, inhalation, or other parenteral administration.

20 Advantages of adenovirus vectors for human gene therapy include the fact that recombination is rare, no human malignancies are known to be associated with such viruses, the adenovirus genome is double stranded DNA which can be manipulated to accept foreign genes of up to 7.5 kb in size, and live adenovirus is a safe human vaccine organisms.

25 Another vector which can express the DNA molecule of the present invention, and is useful in gene therapy, particularly in humans, is vaccinia virus, which can be rendered non-replicating (U.S. Pat. Nos. 5,225,336; 5,204,243; 5,155,020; 4,769,330).

30 Based on the concept of viral mimicry, artificial viral envelopes (AVE) are designed based on the structure and composition of a viral membrane, such as HIV-1 or RSV and used to deliver genes into cells in vitro and in vivo. See, for example, U.S. Pat. No. 5,252,348, Schreier H. et al., J. Mol. Recognit., 1995, 8:59-62; Schreier H et al., J. Biol. Chem., 1994, 269:9090-9098; Schreier, H., Pharm. Acta Helv. 1994, 68:145-159; Chander, R et al. Life Sci., 1992, 50:481-489, which references are hereby 35 incorporated by reference in their entirety. The envelope is preferably produced in a

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two-step dialysis procedure where the "naked" envelope is formed initially, followed by unidirectional insertion of the viral surface glycoprotein of interest. This process and the physical characteristics of the resulting AVE are described in detail by Chander et al., (supra). Examples of AVE systems are (a) an AVE containing the  
5 HIV-1 surface glycoprotein gp160 (Chander et al., supra; Schreier et al., 1995, supra) or glycosyl phosphatidylinositol (GPI)-linked gp120 (Schreier et al., 1994, supra), respectively, and (b) an AVE containing the respiratory syncytial virus (RSV) attachment (G) and fusion (F) glycoproteins (Stecenko, A. A. et al., Pharm. Pharmacol. Lett. 1:127-129 (1992)). Thus, vesicles are constructed which mimic the natural  
10 membranes of enveloped viruses in their ability to bind to and deliver materials to cells bearing corresponding surface receptors.

AVEs are used to deliver genes both by intravenous injection and by instillation in the lungs. For example, AVEs are manufactured to mimic RSV, exhibiting the RSV F  
15 surface glycoprotein which provides selective entry into epithelial cells. F-AVE are loaded with a plasmid coding for the gene of interest, (or a reporter gene such as CAT not present in mammalian tissue).

The AVE system described herein is physically and chemically essentially identical  
20 to the natural virus yet is entirely "artificial", as it is constructed from phospholipids, cholesterol, and recombinant viral surface glycoproteins. Hence, there is no carry-over of viral genetic information and no danger of inadvertent viral infection. Construction of the AVEs in two independent steps allows for bulk production of the plain lipid envelopes which, in a separate second step, can then be marked with the  
25 desired viral glycoprotein, also allowing for the preparation of protein cocktail formulations if desired.

Another delivery vehicle for use in the present invention are based on the recent description of attenuated *Shigella* as a DNA delivery system (Sizemore, D. R. et al.,  
30 Science 270:299-302 (1995), which reference is incorporated by reference in its entirety). This approach exploits the ability of *Shigellae* to enter epithelial cells and escape the phagocytic vacuole as a method for delivering the gene construct into the cytoplasm of the target cell. Invasion with as few as one to five bacteria can result in expression of the foreign plasmid DNA delivered by these bacteria.

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A preferred type of mediator of nonviral transfection in vitro and in vivo is cationic (ammonium derivatized) lipids. These positively charged lipids form complexes with negatively charged DNA, resulting in DNA charged neutralization and compaction. The complexes endocytosed upon association with the cell membrane, and the DNA somehow escapes the endosome, gaining access to the cytoplasm. Cationic lipid:DNA complexes appear highly stable under normal conditions. Studies of the cationic lipid DOTAP suggest the complex dissociates when the inner layer of the cell membrane is destabilized and anionic lipids from the inner layer displace DNA from the cationic lipid. Several cationic lipids are available commercially. Two of these, DMRI and DC-cholesterol, have been used in human clinical trials. First generation cationic lipids are less efficient than viral vectors. For delivery to lung, any inflammatory responses accompanying the liposome administration are reduced by changing the delivery mode to aerosol administration which distributes the dose more evenly.

### Drug screening

Genes identified as changing in various stages of bladder cancer can be used as markers for drug screening. Thus by treating bladder cancer cells with test compounds or extracts, and monitoring the expression of genes identified as changing in the progression of bladder cancers, one can identify compounds or extracts which change expression of genes to a pattern which is of an earlier stage or even of normal bladder mucosa.

It is also within the scope of the invention to use small molecules in drug screening.

The following are non-limiting examples illustrating the present invention.

### Experimentals

#### Affymetrix GeneChip expression analysis cRNA preparation

10 µg total RNA was used as starting material for the cDNA preparation. The first and second strand cDNA synthesis was performed using the SuperScript Choice System (Life Technologies) according to the manufacturers instructions except using a oligo-dT primer containing a T7 RNA polymerase promoter site. Labeled cRNA was prepared using the BioArray High Yield RNA Transcript Labeling Kit (ENZO). Biotin

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labeled CTP and UTP (Enzo) were used in the reaction together with unlabeled NTP's. Following the IVT reaction, the unincorporated nucleotides were removed using RNeasy columns (Qiagen).

5     Array hybridization and scanning

15     Fifteen  $\mu\text{g}$  of cRNA was fragmented at 94°C for 35 min in a fragmentation buffer containing 40 mM Tris-acetate pH 8.1, 100 mM KOAc, 30 mM MgOAc. Prior to hybridization, the fragmented cRNA in a 6xSSPE-T hybridization buffer (1 M NaCl, 10 mM Tris pH 7.6, 0.005% Triton), was heated to 95°C for 5 min and subsequently to  
20     40°C for 5 min before loading onto the Affymetrix probe array cartridge. The probe array was then incubated for 16 h at 45°C at constant rotation (60 rpm). The washing and staining procedure was performed in the Affymetrix Fluidics Station. The probe array was exposed to 10 washes in 6xSSPE-T at 25°C followed by 4 washes in 0.5xSSPE-T at 50°C. The biotinylated cRNA was stained with a streptavidin-  
25     phycoerythrin conjugate, final concentration 2  $\mu\text{g}/\mu\text{l}$  (Molecular Probes, Eugene, OR) in 6xSSPE-T for 30 min at 25°C followed by 10 washes in 6xSSPE-T at 25°C. An antibody amplification step was added using normal goat IgG final concentration 0.1 mg/ml (Sigma) and Anti-streptavidin antibody (goat) biotinylated final concentration 3  $\mu\text{g}/\text{ml}$  (Vector Laboratories). This was followed by a staining step with a streptavidin-  
30     phycoerythrin conjugate, final concentration 2  $\mu\text{g}/\mu\text{l}$  (Molecular Probes, Eugene, OR) in 6xSSPE-T for 30 min at 25°C and 10 washes in 6xSSPE-T at 25°C.

25     The probe arrays were scanned at 560 nm using a confocal laser-scanning microscope with an argon ion laser as the excitation source (Hewlett Packard GeneArray Scanner G2500A). The readings from the quantitative scanning were analysed by the Affymetrix Gene Expression Analysis Software. For comparison from array to array, these were scaled to a global intensity of 150, as previously published (Zhu, H., Cong, J.P., Mamtora, G., Gingeras, T., and Shenk, T. Cellular gene expression altered by human cytomegalovirus: Global monitoring with oligonucleotide arrays. Proc. Natl Acad USA, 95: 14470-75, 1998).

30     A spreadsheet approach using the fold change of gene level and the scoring of presence or absence of genes was used to sort genes in the different categories.

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*Western blotting analysis*

Ten  $\mu$ l diluted protein marker (ECL protein molecular marker, Amersham) were used. The samples were electrophoresed at 200 V for 50 min in an X-CELL system (Novex). Then the proteins were transferred to a PVDF membrane at 30 V for 1 hour followed by blocking for 1 hour. The membrane was subsequently washed in 3 x 10 min in PBS buffer pH 7.4 + 0.1% Tween 20. The membrane was incubated with polyclonal antibodies, against peptides derived from two genes with accession numbers Z40715 and AA116036, overnight at 4°C. The membrane was then washed 3 x 10 min in PBS buffer pH 7.4 + 0.1% Tween 20, followed by incubation for 1 hour with a biotinylated streptavidin horseradish peroxidase complex. The detection reagent (ECL + Western blotting detection system, Amersham) was applied for 5 min. Finally, the membrane was wrapped in plastic, sealed, and scanned in a Phosphorimager, STORM 840 (Molecular Dynamics, Amersham Pharmacia, Sweden).

*Quantitative PCR analysis using Light Cycler (Roche™).*

Quantitative PCR analysis was performed as described in the manufacturers instructions and as described in (Morrison et al (1998) *Biotechniques* 24 (6):954-962.). The quantitation was in all cases related to GAPDH. Ten samples was used in the quantitation experiment: Four T2-4 bladder tumor samples, four Ta bladder tumor samples, and two normal bladder samples.

For verification of expression levels by another method quantitative PCR based on a light cycler was made on three genes using Normal, Ta and T2 biopsy material. RNA was amplified and the data shown in the table below (Table XX) were obtained. It shows that a similar finding as made with the arrays were made using the light cycler. Genes that varied between normal and tumor samples and between tumor samples were reproduced by this independent method, showing the validity of the data. Due to the high number of genes only a few were selected for this reproducibility study, as a proof of principle.

**Quantitative PCR analysis**

Category GeneChip:	Upregulated in tumor	Upregulated in Invasive tumors	Upregulated in tumor
Accession #:	AA101562	AA417030	H20264
	Relative expression	Relative expression	Relative expression
RNA samples			

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T2-4 #1	5,3	24,8	0
T2-4 #2	12,0	30,5	5,8
T2-4 #3	1,0	63,8	0,8
T2-4 #4	12,1	6,8	4,8
Ta #1	4,8	14,2	6,8
Ta #2	6,1	21,7	5,4
Ta #3	7,7	2,2	0,9
Ta #4	9,8	9,0	2,4
Normal #1	Absent	Absent	Absent
Normal #2	Absent	Absent	Absent
Average T2-4	7,6	31,5	2,9
Average Ta	7,1	11,7	3,9
Average Normal	Absent	Absent	Absent

To correlate between RNA levels and protein levels western blots based on antibodies raised against synthetic peptides selected from the EST sequence was performed (see Figure 18). This was done with two EST's and the resulting two antibodies were used for western blotting of solubilized Normal, stage Ta and stage T2 bladder tumors. The experiment showed that similar findings were made using this protein approach. The level of proteins was much higher and more consistent in the tumor tissue than in the normal tissue, often being absent from normal tissue. Due to the high number of EST's only two were selected for this antibody based verification of the proteins (see Figure 18). It should be regarded as a proof of principle.

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**Claims:**

- 5           1. A method of determining the presence or absence of a biological condition in animal tissue
- comprising collecting a sample comprising cells from the tissue and/or expression products from the cells,
- 10           assaying a first expression level of at least one gene from a first gene group, wherein the gene from the first gene group is selected from genes expressed in normal tissue cells in an amount higher than expression in biological condition cells, and/or
- 15           assaying a second expression level of at least one gene from a second gene group, wherein the second gene group is selected from genes expressed in a normal tissue cells in an amount lower than expression in biological condition cells,
- 20           correlating the first expression level to a standard expression level for normal tissue, and/or the second expression level to a standard expression level for biological condition cells to determine the presence or absence of a biological condition in the animal tissue.
- 25           2. The method of claim 1, wherein the animal tissue is selected from body organs.
3. The method of claim 2, wherein the animal tissue is selected from epithelial tissue in body organs.
- 30           4. The method of claim 3, wherein the animal tissue is selected from epithelial tissue in the urinary bladder.
5. The method according to claim 4, wherein the animal tissue is mucosa.

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6. The method of any of the preceding claims, wherein the biological condition is an adenocarcinoma, a carcinoma, a teratoma, a sarcoma, and/or a lymphoma and/or carcinoma-in-situ, and/or dysplasia-in-situ.
- 5 7. The method of any of the preceding claims, wherein the sample is a biopsy of the tissue or of metastasis originating from said tissue.
8. The method according to any of the preceding claim 1-6, wherein the sample is a cell suspension made from the tissue.
- 10 9. The method according to any of the preceding claims, wherein the sample comprises substantially only cells from said tissue.
- 15 10. The method according to claim 9, wherein the sample comprises substantially only cells from mucosa or tumors derived from said mucosa cells.
11. The method according to any of the claims 3-10, wherein the gene from the first gene group is selected individually from genes comprising a sequence as identified below

20

RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
RC_H42123_at	yo61a11.s1 Homo sapiens cDNA clone 182396 3'.
RC_Z39200_at	H. sapiens partial cDNA sequence; clone c-13f02.
RC_N21687_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.
Y13645_at	Homo sapiens mRNA for uroplakin II.
RC_N98461_at	zb86b03.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310445 3'.
RC_W92449_at	zd99d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 357619 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.

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RC_T40767_at	ya11a06.s1 Homo sapiens cDNA clone 61138 3'.
RC_T51972_at	yb29c05.s1 Homo sapiens cDNA clone 72584 3'.
RC_AA286862_at	zs58b06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701651 3'.
RC_N29764_at	yw91b09.s1 Homo sapiens cDNA clone 259577 3'.
AA428172_f_at	zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.
RC_H02265_at	yj35d05.s1 Homo sapiens cDNA clone 150729 3'.
RC_W44745_at	zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.
RC_R91819_at	yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.
AA464468_at	zx84d05.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810441 5'.
RC_AA188647_at	zp78e01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626328 3' similar to TR:G998813 G998813 TIF1. [1] ;.
RC_AA405832_at	zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to TR:G780241 G780241 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. ;.
RC_W37778_f_at	zc13b12.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.t3 LTR2 repetitive element ;.
AF010126_at	Homo sapiens breast cancer-specific protein 1 (BCSG1) mRNA, complete cds.
N36432_at	yx83a05.r1 Homo sapiens cDNA clone 268304 5'.
RC_AA236533_s_at	zr74c04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669126 3' similar to gb:S69002 ECOTROPIC VIRUS INTEGRATION 1 SITE PROTEIN (HUMAN);.
RC_AA293163_at	zt55e05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726272 3'.
RC_AA196790_at	zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.
RC_AA253220_at	zr53g12.s1 Soares NhHMPu S1 Homo sapiens cDNA

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	clone 667174 3'.
RC_AA100437_at	zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.
RC_AA293300_s_at	zt28d03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.
RC_Z39652_at	H. sapiens partial cDNA sequence; clone c-1fg03.
M63509_s_at	Human glutathione transferase M2 (GSTM2) mRNA, complete cds
RC_Z39842_at	H. sapiens partial cDNA sequence; clone c-1ke11.
RC_N23319_at	yx78e10.s1 Homo sapiens cDNA clone 267882 3'.
RC_AA278817_at	zs78d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703605 3'.
L20773_at	Homo sapiens mRNA in the region near the btk gene involved in a-gamma-globulinemia
RC_R69276_at	yi44h05.s1 Soares placenta Nb2HP Homo sapiens cDNA clone 142137 3'.
RC_F02641_at	H. sapiens partial cDNA sequence; clone c-15d02.
RC_AA424791_at	zw03a04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 768174 3' similar to contains Alu repetitive element;.
RC_R39869_at	yf63b06.s1 Homo sapiens cDNA clone 26725 3'.
RC_AA482224_f_at	ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.
RC_AA025277_at	ze76f02.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364923 3' similar to contains Alu repetitive element;contains element LTR4 repetitive element ;.
AA482319_f_at	ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.
RC_AA001045_at	ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.
RC_AA130645_s_at	zo10f03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 567293 3' similar to SW:NI2M_BOVIN Q02369 NADH-UBIQUINONE OXIDOREDUCTASE B22 SUBUNIT ;.

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RC_AA291659_at	zt37c02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724514 3'.
AA046768_at	zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'.
H07011_at	yl81e01.r1 Homo sapiens cDNA clone 44466 5'.
RC_AA293533_i_at	zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXY-PEPTIDASE N 83 KD CHAIN (HUMAN);.
RC_AA100649_at	zn63g10.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 562914 3' similar to SW:LCFA_ECOLI P29212 LONG-CHAIN-FATTY-ACID--COA LIGASE ;.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA180054_at	zp40g07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 611964 3'.
AA263032_s_at	PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
W69310_at	zd46f07.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343717 5'.
RC_AA219653_at	zr05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.
RC_AA457235_at	aa91c07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838668 3'.
RC_AA455967_at	aa16h10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813475 3'.
N27670_at	yx51a09.r1 Homo sapiens cDNA clone 265240 5'.
RC_N80152_at	za65e02.s1 Homo sapiens cDNA clone 297434 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA147218_s_at	zo64g03.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591700 3'.
C01139_at	HUMGS0007818, Human Gene Signature, 3'-directed cDNA sequence.
AA285284_at	PMY0691 KG1a Lambda Zap Express cDNA Library

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	Homo sapiens cDNA 5'.
RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.
RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA479096_at	zv17e07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753924 3'.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.
RC_T03927_at	seq2490 Homo sapiens cDNA clone 3HFLSK20-87 3'.
AA314457_at	EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.
RC_AA191524_at	zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.
RC_N29740_at	yw90b12.s1 Homo sapiens cDNA clone 259487 3'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.
RC_AA404487_at	zw38a06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772306 3'.
RC_H16666_at	ym26a10.s1 Homo sapiens cDNA clone 49155 3'.
RC_AA406197_at	zv24d11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754581 3'.
RC_H09594_at	yl97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;.

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RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_AA293533_f_at	zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXY-PEPTIDASE N 83 KD CHAIN (HUMAN);.
RC_AA398197_at	zt59a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'.
AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
RC_AA236356_at	zr54a11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 667196 3'.
W92678_at	zd92a04.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 356910 5' similar to contains element LTR3 repetitive element ;.
RC_N63332_at	yz33d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element;.
C16281_s_at	Human aorta cDNA 5'-end GEN-259H09.
RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.
H88035_s_at	yw20e07.r1 Homo sapiens cDNA clone 252804 5'.
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_R45698_at	yg45h12.s1 Homo sapiens cDNA clone 35838 3'.
RC_AA236542_at	zr75g11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669284 3'.
AA376875_at	EST89388 Small intestine I Homo sapiens cDNA 5' end similar to monoamine oxidase A.
RC_R43365_at	yg15g06.s1 Homo sapiens cDNA clone 32365 3'.
RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_AA057620_at	zf15h06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377051 3'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens

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	cDNA clone 789160 3'.
RC_AA598872_at	ae37b10.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897979 3'.
RC_AA147646_s_at	zl52g06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505594 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.
RC_N54365_at	yv39c06.s1 Homo sapiens cDNA clone 245098 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
AA046593_at	zk62g01.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487440 5'.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.
RC_AA256273_at	zr81c12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682102 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.
RC_AA086005_at	zl84c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'.
RC_AA479885_at	zw44a07.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772884 3'.
AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
R15268_at	yf89f02.r1 Homo sapiens cDNA clone 29665 5'.
RC_AA443658_at	zw86a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783834 3' similar to TR:G438639 G438639 LAMIN B RECEPTOR. [1] ;.

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RC_H16790_at	ym39b01.s1 Homo sapiens cDNA clone 50559 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
AB002321_at	Human mRNA for KIAA0323 gene, partial cds.
RC_Z38810_at	H. sapiens partial cDNA sequence; clone c-0qb09.
AC000115_cds1_at	WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
AA309880_at	EST180743 Jurkat T-cells V Homo sapiens cDNA 5' end.
RC_R43812_at	yg21a08.s1 Homo sapiens cDNA clone 32940 3'.
RC_AA425636_at	zv47a04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756750 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_AA279420_at	zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.
RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
AF007216_at	Homo sapiens sodium bicarbonate cotransporter (HNBC1) mRNA, complete cds.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
D79601_f_at	Human aorta cDNA 5'-end GEN-286G10.
RC_N30856_at	yw70f05.s1 Homo sapiens cDNA clone 257601 3'.
L29218_s_at	Homo sapiens clk2 mRNA, complete cds
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPIDERMAL GROWTH FACTOR RECEPTOR KINASE SUBSTRATE.

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AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
RC_AA252765_at	zs27d03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.
RC_W46846_at	zc36a04.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324366 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.
RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_N52565_at	yv36d12.s1 Homo sapiens cDNA clone 244823 3'.
RC_W32506_s_at	zc06a02.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321482 3'.
RC_AA255539_at	zr85c04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682470 3'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.
AA091278_at	cchn2404.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.
AA091412_s_at	ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA046865_at	zf12b09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376697 5'.
AA324825_at	EST27743 Cerebellum II Homo sapiens cDNA 5' end.
RC_AA454840_s_at	zx79d09.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 809969 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_AA402484_at	zt65c03.s1 Soares testis NHT Homo sapiens cDNA clone 727204 3'.
W26883_at	15h10 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.

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RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
RC_AA121360_s_at	zn77a05.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564176 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.
H18718_at	ym45b05.r1 Homo sapiens cDNA clone 51043 5' similar to contains Alu repetitive element;.
RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_R67996_at	yi04c10.s1 Homo sapiens cDNA clone 138258 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_F11115_at	H. sapiens partial cDNA sequence; clone c-33a10.
RC_R08871_at	yf21e07.s1 Homo sapiens cDNA clone 127524 3'.
RC_AA224324_at	zr12e05.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648608 3'.
RC_AA399226_at	zt50c01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725760 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.
RC_AA464240_s_at	zx81a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810128 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
RC_AA029288_at	zk10b03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470093 3' similar to PIR:H45193 H45193 zinc finger protein ZNF65 ;.
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar

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	to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR ;.
J04813_s_at	Human cytochrome P450 PCN3 gene, complete cds
RC_AA465093_at	aa32h08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815007 3'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA256680_at	zr82h09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682241 3'.
AA147510_s_at	zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
R78119_at	yi80c10.r1 Homo sapiens cDNA clone 145554 5'.
RC_Z38407_s_at	H. sapiens partial cDNA sequence; clone c-0ac03.
RC_AA287107_s_at	zs58f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701711 3'.
RC_AA287042_at	zs57e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701604 3'.
AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA402622_at	zu47g07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741180 3'.
RC_AA436628_at	zw55e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773994 3'.
RC_AA282138_at	zt02a10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711930 3'.
AA045870_at	zk75a04.r1 Soares pregnant uterus NbHPU Homo sapi-

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	ens cDNA clone 488622 5'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8. [1] ;.
RC_AA609210_at	af12f04.s1 Soares testis NHT Homo sapiens cDNA clone 1031455 3'.
RC_AA133469_at	zo13e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 586796 3'.
R22139_at	yh25b11.r1 Homo sapiens cDNA clone 130749 5'.
AA305116_at	EST176117 Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA026397_at	ze92d07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366445 3'.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.
H89575_s_at	yw28c11.r1 Homo sapiens cDNA clone 253556 5'.
RC_AA251003_at	zs07g11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684548 3'.
RC_AA279408_at	zs84h09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704225 3'.
RC_AA281760_at	zt07g10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712482 3' similar to TR:G808826 G808826 HYPOTHETICAL 25.7 KD PROTEIN. ;.
AB002381_at	Human mRNA for KIAA0383 gene, partial cds.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens

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	cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.
RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
T94506_at	ye36a05.r1 Homo sapiens cDNA clone 119792 5'.
D55869_s_at	Human fetal brain cDNA 5'-end GEN-404F02.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds
U77942_at	Human syntaxin 7 mRNA, complete cds.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.
RC_AA194045_at	zr38c08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665678 3'.
RC_AA025104_at	ze78f05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365121 3'.
RC_AA242822_at	zr65e09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668296 3'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA489383_at	ab41e08.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 843398 3'.
RC_AA621188_at	zu81a08.s1 Soares testis NHT Homo sapiens cDNA clone 744374 3'.
RC_AA486182_at	ab35a01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842760 3'.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
RC_AA024866_at	ze79b09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365177 3'.
RC_AA450373_at	zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens

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	cDNA clone 785627 3'.
N78483_at	yz78d07.r1 Homo sapiens cDNA clone 289165 5'.
RC_AA281245_at	zs94d07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705133 3'.
W52431_at	zc45b12.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN. [2] PIR:S07807 ;.
RC_AA446597_at	zw84f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783673 3'.
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.
X73501_at	H.sapiens gene for cytokeratin 20
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;.

and from a sequence as identified below

AB002370_at	Human mRNA for KIAA0372 gene, complete cds.
AF000546_at	Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.
H43922_at	yo70c03.r1 Homo sapiens cDNA clone 183268 5'.
H44269_at	yp17b05.r1 Homo sapiens cDNA clone 187665 5' similar to contains Alu repetitive element;.
H88706_s_at	yw23e08.r1 Homo sapiens cDNA clone 253094 5'.
L25880_s_at	Homo sapiens epoxide hydrolase (EPHX) gene, complete cds
N81162_at	yw36d01.r1 Homo sapiens cDNA clone 254305 5'.
RC_F10381_s_at	H. sapiens partial cDNA sequence; clone c-3ec07.
RC_H54558_at	EST00018 HE6W Homo sapiens cDNA clone HE6WCR108 3'.
RC_H58692_s_	yr20g08.s1 Homo sapiens cDNA clone 205886 3' similar to

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at	SP:FTDH_RAT P28037 FORMYLTETRAHYDROFOLATE DEHYDROGENASE ;.
RC_N20047_at	yx28d06.s1 Homo sapiens cDNA clone 263051 3'.
RC_N38810_at	yv28e04.s1 Homo sapiens cDNA clone 244062 3'.
RC_R46497_at	yg51h01.s1 Homo sapiens cDNA clone 36305 3'.
RC_R55001_at	yj76a08.s1 Homo sapiens cDNA clone 154646 3'.
RC_T29986_s_at	EST10130 Homo sapiens cDNA 3' end similar to None.
RC_T30214_at	EST12901 Homo sapiens cDNA 3' end similar to None.
RC_T40438_at	ya01c07.s2 Homo sapiens cDNA clone 60204 3'.
RC_W51910_at	zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.
RC_W73949_at	zd71f09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 346121 3'.
RC_W86375_s_at	zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.
RC_Z38289_at	H. sapiens partial cDNA sequence; clone c-05e04.
RC_Z38807_s_at	H. sapiens partial cDNA sequence; clone c-0qb04.
RC_Z39599_at	H. sapiens partial cDNA sequence; clone c-1ed10.
RC_AA025351_at	ze74h03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364757 3' similar to contains OFR.t1 OFR repetitive element ;.
RC_AA136474_at	zi01f04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491071 3'.
RC_AA136611_at	zk99b02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490923 3'.
RC_AA233375_at	zr48f07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666661 3'.
RC_AA235621_s_at	zt36c05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724424 3'.
RC_AA253331_at	zr72g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668978 3'.
RC_AA393793_at	zv64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens

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at	cDNA clone 758394 3'.
RC_AA419547_at	zv04a05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752624 3'.
RC_AA421100_at	zu27d11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739221 3'.
RC_AA443277_at	zw87f06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783971 3'.
RC_AA446570_at	zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.
RC_AA447123_at	zw93c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784512 3'.
RC_AA449343_at	zx06g09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785728 3'.
RC_AA456016_at	aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.
RC_AA479299_at	zv21f04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754303 3'.
RC_AA479350_at	zv17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ;.
U85707_at	Human leukemogenic homolog protein (MEIS1) mRNA, complete cds
U94831_at	Human multispinning membrane protein mRNA; complete cds. /gb=U94831 /ntype=RNA
W27827_at	38c8 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
W81301_at	zd85a12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347422 5'.
Y12711_at	H.sapiens mRNA for putative progesterone binding protein
AA074407_at	zm15c08.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 525710 5'.
AA091017_at	yy1646.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA104023_at	l7134.seq.F Fetal heart, Lambda ZAP Express Homo sapiens

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	cDNA 5'.
AA171913_at	zo95d05.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594633 5'.
AA195678_at	zr32h05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 665145 5'.
AA227678_at	zr55e05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 667328 5'.
AA247204_at	csg0306.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA479995_at	zv18b05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753969 5'.

or from a sequence as identified below

RC_H14633_at	yl26e06.s1 Homo sapiens cDNA clone 159394 3'.
RC_N62506_at	yz74d02.s1 Homo sapiens cDNA clone 288771 3'.
RC_N70481_at	za74g10.s1 Homo sapiens cDNA clone 298338 3'.
RC_N73988_at	za57b06.s1 Homo sapiens cDNA clone 296627 3'.
RC_T53404_at	ya88g06.s1 Homo sapiens cDNA clone 68794 3'.
RC_Z38149_at	H. sapiens partial cDNA sequence; clone c-01a09.
RC_Z38849_at	H. sapiens partial cDNA sequence; clone c-0rb11.
RC_AA037409_at	zc03h03.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321269 3'.
RC_AA084318_at	zn18b04.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547759 3'.
RC_AA126419_at	zk94d04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490471 3'.

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RC_AA12840 7_at	zm24d04.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526567 3'.
RC_AA17343 0_at	zp02e08.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595238 3'.
RC_AA39810 4_at	zt58d03.s1 Soares testis NHT Homo sapiens cDNA clone 726533 3'.
RC_AA39941 4_at	zt50e07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725796 3'.
RC_AA43147 9_at	zw72f05.s1 Soares testis NHT Homo sapiens cDNA clone 781761 3'.
RC_AA43647 1_at	zv08e05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753056 3'.
RC_AA44945 5_at	zx05e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785610 3' similar to contains Alu repetitive element;.
RC_AA45889 9_at	zx88d07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810829 3'.
RC_AA46363 0_s_at	zx98g09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811840 3'.
RC_AA48900 9_at	aa54d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824757 3'.
W37319_at	zc11f08.r1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322023 5'.

or from a sequence as identified below

yx16e10.r1 Homo sapiens cDNA clone 261930 5'.	N24990_s_at
yf41e08.r1 Homo sapiens cDNA clone 129446 5' similar to SP:A46661 A46661 LEUKOTRIENE B4 OMEGA-HYDROXYLASE, P-450LTB OMEGA=CYTOCHROME P-450 SUPERFAMILY MEMBER - ;.	R11267_at
yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.	RC_H52937_at
yr89e02.s1 Homo sapiens cDNA clone 212474 3'.	RC_H69547_at
yu73c12.s1 Homo sapiens cDNA clone 239446 3'.	RC_H70047_at

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yx99c11.s1 Homo sapiens cDNA clone 269876 3'.	RC_N24879_at
yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	RC_N66312_at
yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	RC_R22189_at
yg44f05.s1 Homo sapiens cDNA clone 35270 3'.	RC_R45582_at
yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	RC_R53457_at
yi49g10.s1 Homo sapiens cDNA clone 142626 3'.	RC_R70903_at
zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	RC_AA054321_s_at
zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	RC_AA099820_at
zl17g05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 3'.	RC_AA127238_at
zo64h02.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591699 3'.	RC_AA147224_at
zq12e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629498 3'.	RC_AA192765_at
zr33d07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665197 3'.	RC_AA195718_at
zr28b08.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664695 3' similar to gb:L05779 SOLUBLE EPOXIDE HYDROLASE (HUMAN);.	RC_AA232114_s_at
zt07h12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712487 3'.	RC_AA281770_at
zw59e03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774364 3' similar to TR:G1199667 G1199667 PROTEIN KINASE C-BINDING PROTEIN ENIGMA ;.	RC_AA430209_at
zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	RC_AA452410_at
aa39g12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815686 3'.	RC_AA485115_at
zk85e12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489646 5'.	AA099391_s_at
zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CA-	AA131127_at

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THEPSIN ;	
zp02c06.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595210 5' similar to SW:QRI2_YEAST P43124 HYPOTHETICAL 46.1 KD PROTEIN IN PHO2-POL3 INTERGENIC REGION. [1] ;	AA173505_at
zt39b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724693 5'.	AA291786_s_at
zu53f10.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741739 5'.	AA402971_s_at

or from a sequence as identified below

Human mRNA for IgG Fc binding protein, complete cds	D84239_at
yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248345 3'.	RC_N54841_at
ya88f04.s1 Homo sapiens cDNA clone 68767 3'.	RC_T53389_s_at
ye30d12.s1 Homo sapiens cDNA clone 119255 3'.	RC_T98227_at
zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	RC_AA215379_at
zr81e12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682126 3'.	RC_AA256485_at
zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;	RC_AA290679_at
zw46c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773088 3'.	RC_AA425309_at
zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.	RC_AA429655_at
aa90h11.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838629 3' similar to contains Alu repetitive element;	RC_AA456981_at
zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	RC_AA461174_at
zd27g09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341920 5'.	W61377_at

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AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CATHEPSIN ;.
AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5' end.
AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to contains element TAR1 repetitive element ;.
C01409_s_at	HUMGS0008391, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA256485_at	zr81e12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682126 3'.
RC_AA290679_at	zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;.
RC_AA429655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.
RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.
RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.
RC_AA491463_at	ab01d12.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839543 3'.
RC_AA025434_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.
RC_AA026030_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to PIR:A48764 A48764 calpain ;.
RC_AA054321_s_at	zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.
RC_AA099820_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.
RC_AA161043_at	zo74g11.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592676 3'.
RC_AA215379_at	zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.
RC_H09281_at	yl98f11.s1 Homo sapiens cDNA clone 46316 3'.
RC_H18836_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.
RC_H52937_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.
RC_H69547_at	yr89e02.s1 Homo sapiens cDNA clone 212474 3'.
RC_H95039_at	yv20a05.s1 Homo sapiens cDNA clone 243248 3'.
RC_N21687_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.
RC_N54841_at	yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248345 3'.
RC_N59622_at	yv74b06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248435 3'.
RC_N66312_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.

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RC_N90717_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.
RC_R22189_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.
RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 39835 3'.
RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.
RC_W86375_s_at	zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.
RC_Z38289_at	H. sapiens partial cDNA sequence; clone c-05e04.

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 12. The method according to claim 11, wherein the gene from the first gene group is selected individually from genes comprising a sequence as identified below

RC_AA621122_at	af34f04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 1033567 3'.
RC_AA129216_at	zn84b03.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 564845 3'.
RC_AA133214_s_at	zk97h05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490809 3'.
RC_H99675_at	yx35c02.s1 Homo sapiens cDNA clone 263714 3'.
RC_R87160_at	yq31h10.s1 Homo sapiens cDNA clone 197443 3'.

10 18). wherein the notation refers to Accession No. in the database UniGene (Build

13. The method according to claim 12, wherein the gene from the first gene group is selected individually from genes comprising a sequence as identified below

RC_AA429904_at	zw66d03.s1 Soares testis NHT Homo sapiens cDNA clone 781157 3'.
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wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 20 14. The method according to claim 13, wherein the gene from the first gene group is selected individually from genes comprising a sequence as identified below

RC_AA460273_at	zx67f05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796545 3'.
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RC_AA490930_at	aa46e04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 3'.
RC_AA418072_at	zv97g08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767774 3'.
RC_H61476_s_at	yr17e08.s1 Homo sapiens cDNA clone 205574 3'.
RC_H16209_at	yl28d11.s1 Homo sapiens cDNA clone 159573 3'.
RC_N93816_at	zb63f11.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 308301 3'.
RC_H17550_at	ym41h05.s1 Homo sapiens cDNA clone 50842 3'.
RC_N36835_at	yy35f02.s1 Homo sapiens cDNA clone 273243 3'.
RC_T35289_at	EST82492 Homo sapiens cDNA 3' end similar to None.
RC_AA447977_s_at	zw82e09.s1 Soares testis NHT Homo sapiens cDNA clone 782728 3'.
RC_AA160879_at	zo62h06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591515 3'.
RC_W45051_at	zc21g08.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 323006 3'.
RC_AA040699_at	zk48g04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486102 3'.
RC_R63734_at	yi15g05.s1 Homo sapiens cDNA clone 139352 3'.
RC_T61475_at	yc06h08.s1 Homo sapiens cDNA clone 79935 3'.
H23847_at	yn71d04.r1 Homo sapiens cDNA clone 173863 5'.
RC_AA482014_at	zu98d05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:746025 3' similar to TR:G414993 G414993 CEN-TRIN. ;.
RC_AA143323_s_at	zo37d04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589063 3' similar to gb:M60483_rna1 PROTEIN PHOSPHATASE PP2A-ALPHA, CATALYTIC SUBUNIT (HUMAN);.
R55902_at	yg92d05.r1 Homo sapiens cDNA clone 41017 5'.
RC_AA035638_at	zk28a05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471824 3'.
AA263146_at	PMY0511 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
RC_W19222_at	zb89h05.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310809 3' similar to contains Alu repetitive element;contains element L1 repetitive element ;.
RC_AA262276_at	zs25f07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686245 3'.
H61361_s_at	yu41b03.r1 Homo sapiens cDNA clone 236333 5'.
RC_R10657_s_at	yf31e11.s1 Homo sapiens cDNA clone 128492 3'.
RC_AA227261_at	zr22h04.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664183 3'.
RC_AA477641_at	zu37b12.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 740159 3'.
RC_T70596_at	yd15f10.s1 Homo sapiens cDNA clone 108331 3'.
R31641_at	yh69e02.r1 Homo sapiens cDNA clone 135002 5'.
RC_N62855_at	yz83c04.s1 Homo sapiens cDNA clone 289638 3'.
RC_AA279695_at	zs92d10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704947 3'.
RC_H95071_s_at	yv20f02.s1 Soares fetal liver spleen 1NFLS Homo sapiens

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	cDNA clone 243291 3'.
RC_N54385_at	yv39f05.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 245121 3'.
H15314_at	ym28c02.r1 Homo sapiens cDNA clone 49413 5'.
RC_AA151435_at	zl43h11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504741 3'.
RC_F01568_at	H. sapiens partial cDNA sequence; clone c-06g08.

or a sequence as identified below

RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
RC_W44745_at	zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.
AA482319_f_at	ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.
RC_AA155820_at	zo47a08.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590006 3'.
H51340_at	yo30c06.r1 Homo sapiens cDNA clone 179434 5'.
RC_H09594_at	yl97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_N29764_at	yw91b09.s1 Homo sapiens cDNA clone 259577 3'.
R80048_at	yi91e08.r1 Homo sapiens cDNA clone 146630 5'.
AC000115_cds1_at	WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.
RC_AA100437_at	zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.
RC_R39869_at	yf63b06.s1 Homo sapiens cDNA clone 26725 3'.
RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA196790_at	zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.
RC_R39923_at	yf51d10.s1 Homo sapiens cDNA clone 25662 3'.
RC_R91819_at	yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.
AA484982_at	aa39b02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815595 5'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.
RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.

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RC_AA166810_at	zo87a05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593840 3'.
RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
AA046674_at	zf12d12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376727 5'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.
RC_AA243721_at	zr68f11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668589 3'.
RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_N29345_at	yw85c10.s1 Homo sapiens cDNA clone 259026 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA156187_at	zo47c04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590022 3' similar to contains Alu repetitive element;.
RC_AA157340_at	zo42h04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589591 3'.
RC_AA343514_at	EST49299 Gall bladder I Homo sapiens cDNA 3' end.
RC_AA482224_f_at	ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.
RC_AA053021_at	zl72f02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510171 3'.
RC_AA279420_at	zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.
RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.
RC_N31597_s_at	yy20b11.s1 Homo sapiens cDNA clone 271773 3'.
U31875_at	Human.Hep27 protein mRNA, complete cds.
RC_F04611_at	H. sapiens partial cDNA sequence; clone c-zse11.
AA263032_s_at	PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
AA447052_at	zw86b06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783827 5' similar to TR:G595950 G595950 PROTEIN N-TERMINAL ASPARAGINE AMIDOHYDROLASE. ;.
RC_AA056247_at	zf62c02.s1 Soares retina N2b4HR Homo sapiens cDNA clone 381506 3' similar to contains Alu repetitive element;.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_AA456039_at	aa03d01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812161 3'.
RC_AA461444_at	zx68b01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796585 3'.

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RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
RC_AA034365_at	zf02b10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375739 3' similar to gb:J05096_rna1 SODIUM/POTASSIUM-TRANSPORTING ATPASE ALPHA-1 CHAIN (HUMAN);contains Alu repetitive element;.
RC_N22115_s_at	yw32a09.s1 Homo sapiens cDNA clone 253912 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.
AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
AA428172_f_at	zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.
C01790_at	HUMGS0003746, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.
RC_AA026270_at	ze97f07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366949 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_H60595_s_at	yr41h02.s1 Homo sapiens cDNA clone 207891 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_N91023_at	zb41a09.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 306136 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_T51995_at	yb29e09.s1 Homo sapiens cDNA clone 72616 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.
RC_AA609614_at	af15f12.s1 Soares testis NHT Homo sapiens cDNA clone 1031759 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.
AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_Z39652_at	H. sapiens partial cDNA sequence; clone c-1fg03.
AB002321_at	Human mRNA for KIAA0323 gene; partial cds.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.

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RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.
RC_AA450373_at	zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.
U77942_at	Human syntaxin 7 mRNA, complete cds.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.
RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.
RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPIDERMAL GROWTH FACTOR RECEPTOR KINASE SUBSTRATE. ;.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTI-

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	VATOR ;.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.
RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
AA147510_s_at	zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8. [1] ;.
AA091412_s_at	ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.
AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;.
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;.
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.

wherein the notation refers to Accession No. in the database UniGene (Build 18)

15. The method according to any of claims 4-14, wherein the second gene group  
5 are selected individually from genes comprising a sequence as identified below

RC_AA116036_at zm79a11.s1 Stratagene neuroepithelium (#937231) Homo
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	sapiens cDNA clone 531836 3'.
RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564116 3' similar to contains Alu repetitive element;.
RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.
RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 16. The method according to any of claims 4-15, wherein the second gene group are selected individually from genes comprising a sequence as identified below

AA402119_at	zu55d04,r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA, ;.
RC_AA102581_at	zn42d02,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550083 3',
RC_H14089_at	ym62c07,s1 Homo sapiens cDNA clone 163500 3',
RC_R46079_f_at	yg49c02,s1 Homo sapiens cDNA clone 36133 3',
RC_R67918_at	yi25g01,s1 Homo sapiens cDNA clone 140304 3',
RC_W15360_at	zc17d10,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;.
AA082171_at	zn42g07,r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5',
AA425593_at	zw48f02,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5',
F15201_at	H, sapiens partial cDNA sequence,
H15219_at	ym30f02,r1 Homo sapiens cDNA clone 49693 5',
R60368_at	yh04b02,r1 Homo sapiens cDNA clone 42052 5',
R86859_at	ym86a02,r1 Homo sapiens cDNA clone 165770 5',
RC_AA045342_at	zk59g01,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3',
RC_AA171985_at	zo98g05,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3',
T63174_s_at	yc04e08,r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element;.
U90268_at	Human Krit1 mRNA, complete cds,
X14787_at	Human mRNA for thrombospondin
RC_AA196991_s_at	zq10a10,s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, ;.
RC_F02470_at	H, sapiens partial cDNA sequence; clone c-10c01,
RC_F08899_at	H, sapiens partial cDNA sequence; clone c-2uc10,
RC_H15259_at	ym30c10,s1 Homo sapiens cDNA clone 49795 3',
RC_H52133_at	yo44d04,s1 Homo sapiens cDNA clone 180775 3',

RC_R17059_at	yf45a10,s2 Homo sapiens cDNA clone 129786 3',
RC_R45292_at	yg46b01,s1 Homo sapiens cDNA clone 35626 3',

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 17. The method according to any of claims 4-14, wherein the second gene group are selected individually from genes comprising a sequence as identified below

C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,
D80002_at	Human mRNA for KIAA0180 gene, partial cds
RC_AA149586_at	zl39e03,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3',
RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',
RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',
RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',
RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element,,
RC_R46206_at	yj53d08,s1 Homo sapiens cDNA clone 152463 3',
RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38554 3',
AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',
AB002346_at	Human mRNA for KIAA0348 gene, complete cds,
D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,
M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds
N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',
RC_AA149044_at	zl45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',
RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',
RC_AA281743_r_at	zt06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',
RC_AA406338_at	zv10f06,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',
RC_AA424524_at	zv90g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',
RC_AA435840_at	zt80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',
RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',
RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',
RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',
RC_AA148923_at	zl27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',
RC_H98653_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',

RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',
RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',
RC_T90374_at	yd43e03,s1 Homo sapiens cDNA clone 111004 3' similar to SP:POL2_MOUSE P11369 RETROVIRUS-RELATED POL POLYPROTEIN ;,
RC_Z38182_at	H, sapiens partial cDNA sequence; clone c-02a08,

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 18. The method according to any of claims 4-17, wherein the second gene group comprises a sequence as identified below

RC_AA054726_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	zq77f02,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',
AA115572_s_at	zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN, ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',
RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains Alu repetitive element;contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',
RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone

	752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',
S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;,
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',
RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,

or a sequence as identified below

AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',
RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',

RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',
RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTERCELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',
AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTC1L1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',
AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',
RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zl74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;,
RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',
RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',

RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2
RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element; ,
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3',
RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zi40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',
RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN); ,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ; ,

wherein the notation refers to Accession No. in the database UniGene (Build 18).

19. The method according to any of the preceding claims, wherein the expression level of at least one gene from the first gene group is determined.
- 5 20. The method according to any of the preceding claims, wherein the expression level of at least two genes from the first gene group are determined.
21. The method according to any of the preceding claims, wherein the expression level of at least three genes from the first gene group are determined.
- 10 22. The method according to any of the preceding claims, wherein the expression level of at least four genes from the first gene group are determined.
23. The method according to any of the preceding claims, wherein the expression level of at least five genes from the first gene group are determined.
- 15 24. The method according to any of the preceding claims, wherein the expression level of more than six genes from the first gene group are determined.
25. The method according to any of the preceding claims, wherein the expression level of at least one gene from the second gene group is determined.
- 20 26. The method according to any of the preceding claims, wherein the expression level of at least two genes from the second gene group are determined.
- 25 27. The method according to any of the preceding claims, wherein the expression level of at least three genes from the second gene group are determined.
28. The method according to any of the preceding claims, wherein the expression level of at least four genes from the second gene group are determined.
- 30 29. The method according to any of the preceding claims, wherein the expression level of at least five genes from the second gene group are determined.
- 35 30. The method according to any of the preceding claims, wherein the expression level of more than six genes from the second gene group are determined.

- 5 31. The method according to any of the preceding claims, wherein the difference in expression level of a gene from one group to the expression level of a gene from another group is at least two-fold.
- 10 32. The method according to any of the preceding claims, wherein the difference in expression level of a gene from one group to the expression level of a gene from another group is at least three-fold.
33. The method according to any of the preceding claims, wherein the expression level is determined by determining the mRNA of the cells.
- 15 34. The method according to any of the claims 1-32, wherein the expression level is determined by determining expression products, such as peptides, in the cells.
- 20 35. The method according to claim 34, wherein the expression level is determined by determining expression products, such as peptides, in the body fluids, such as blood, serum, plasma, faeces, mucus, sputum, cerebrospinal fluid, and/or urine.
- 25 36. A method of determining the stage of a biological condition in animal tissue, comprising collecting a sample comprising cells from the tissue,
- 30 assaying the expression of at least a first stage gene from a first stage gene group and/or at least a second stage gene from a second stage gene group, wherein at least one of said genes is expressed in said first stage of the condition in a higher amount than in said second stage, and the other gene is expressed in said first stage of the condition in a lower amount than in said second stage of the condition,
- correlating the expression level of the assessed genes to a standard level of expression determining the stage of the condition.



37. The method according to claim 36, wherein the tissue is selected from the epithelial tissue in bladder.
38. The method according to any of the preceding claims 36-37, wherein the difference in expression levels between a gene from one group to a gene from another group is at least one-fold.
39. The method according to any of the preceding claims 36-38, wherein the difference in expression levels between a gene from one group to a gene from another group is at least two-fold.
40. The method according to claim 36, wherein the stage is selected from bladder cancer stages Ta, T1, T2, T3 and T4.
41. The method according to claim 40, comprising assaying at least the expression of a Ta stage gene from a Ta stage gene group, at least one T1 stage gene from a T1 stage gene group, at least a T2 stage gene from a T2 stage gene group, at least a T3 stage gene from a T3 stage gene group, at least a T4 stage gene group from a T4 stage gene group, wherein at least one gene from each gene group is expressed in a significantly different amount in that stage than in one of the other stages.
42. The method according to claim 41, wherein at least one gene from each gene group is expressed in a significantly higher amount in that stage than in one of the other stages.
43. The method according to claim 42, wherein a Ta stage gene is selected individually from any gene comprising a sequence as identified below

AA402119_at	zu55d04,r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA, ;,
RC_AA102581_at	zn42d02,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550083 3',
RC_H14089_at	ym62c07,s1 Homo sapiens cDNA clone 163500 3',
RC_R46079_f_at	yg49c02,s1 Homo sapiens cDNA clone 36133 3',
RC_R67918_at	yi25g01,s1 Homo sapiens cDNA clone 140304 3',
RC_W15360_at	zc17d10,s1 Soares parathyroid tumor NbHPA Homo sa-

	piens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;,
AA082171_at	zn42g07,r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5',
AA425593_at	zw48f02,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5',
F15201_at	H, sapiens partial cDNA sequence,
H15219_at	ym30f02,r1 Homo sapiens cDNA clone 49693 5',
R60368_at	yh04b02,r1 Homo sapiens cDNA clone 42052 5',
R86859_at	ym86a02,r1 Homo sapiens cDNA clone 165770 5',
RC_AA045342_at	zk59g01,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3',
RC_AA171985_at	zo98g05,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3',
T63174_s_at	yc04e08,r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element;,,
U90268_at	Human Krit1 mRNA, complete cds,
X14787_at	Human mRNA for thrombospondin
RC_AA196991_s_at	zq10a10,s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, ;,
RC_F02470_at	H, sapiens partial cDNA sequence; clone c-10c01,
RC_F08899_at	H, sapiens partial cDNA sequence; clone c-2uc10,
RC_H15259_at	ym30c10,s1 Homo sapiens cDNA clone 49795 3',
RC_H52133_at	yo44d04,s1 Homo sapiens cDNA clone 180775 3',
RC_R17059_at	yf45a10,s2 Homo sapiens cDNA clone 129786 3',
RC_R45292_at	yg46b01,s1 Homo sapiens cDNA clone 35626 3',

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 44. The method according to claim 42, wherein a T1 stage gene is selected individually from any gene comprising a sequence as identified below

C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,
D80002_at	Human mRNA for KIAA0180 gene, partial cds
RC_AA149586_at	zl39e03,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3',
RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',
RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',
RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',
RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;,,
RC_R46206_at	yj53d08,s1 Homo sapiens cDNA clone 152463 3',
RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38554 3',
AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapi-

	ens cDNA clone 486790 5',
AB002346_at	Human mRNA for KIAA0348 gene, complete cds,
D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,
M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds
N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',
RC_AA149044_at	zl45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',
RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',
RC_AA281743_r_at	zt06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',
RC_AA406338_at	zv10f06,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',
RC_AA424524_at	zv90g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',
RC_AA435840_at	zt80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',
RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',
RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',
RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',
RC_AA148923_at	zl27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',
RC_H98653_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',
RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',
RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',
RC_T90374_at	yd43e03,s1 Homo sapiens cDNA clone 111004 3' similar to SP:POL2_MOUSE P11369 RETROVIRUS-RELATED POL POLYPROTEIN ;,
RC_Z38182_at	H, sapiens partial cDNA sequence; clone c-02a08,

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 45. The method according to claim 42, wherein a T2 stage gene is selected individually from any gene comprising a sequence as identified below

wherein the notation refers to Accession No. in the database UniGene (Build 18).

RC_AA054726_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	zq77f02,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',

AA115572_s_at	zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN, ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',
RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains Alu repetitive element;contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',
RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',
S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;,,
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',

RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,

or a sequence as identified below

AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',
RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',
RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',
RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283. INTERCELLULAR ADHESION MOLECULE-1 PRE-CURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',
AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',

AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',
RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zl74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;;
RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;,
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',
RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',
RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 ;,
RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;;
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3',

RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zl40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',
RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;,

46. The method according to claim 41, wherein at least one gene from each gene group is expressed in a significantly lower amount in that stage than in one of the other stages.

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47. The method according to claim 46, wherein a Ta stage gene is selected individually from any gene comprising a sequence as identified below

RC_AA621122_at	af34f04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 1033567 3'.
RC_AA129216_at	zn84b03.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 564845 3'.
RC_AA133214_s_at	zk97h05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490809 3'.
RC_H99675_at	yx35c02.s1 Homo sapiens cDNA clone 263714 3'.
RC_R87160_at	yq31h10.s1 Homo sapiens cDNA clone 197443 3'.

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wherein the notation refers to Accession No. in the database UniGene (Build 18).

48. The method according to claim 46, wherein a T1 stage gene is selected individually from any gene comprising a sequence as identified below

RC_AA429904_at	zw66d03.s1 Soares testis NHT Homo sapiens cDNA clone 781157 3'.
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- 5 wherein the notation refers to Accession No. in the database UniGene (Build 18).

49. The method according to claim 46, wherein a T2 stage gene is selected individually from any gene comprising a sequence as identified below

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RC_AA460273_at	zx67f05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796545 3'.
RC_AA490930_at	aa46e04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 3'.
RC_AA418072_at	zv97g08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767774 3'.
RC_H61476_s_at	yr17e08.s1 Homo sapiens cDNA clone 205574 3'.
RC_H16209_at	yl28d11.s1 Homo sapiens cDNA clone 159573 3'.
RC_N93816_at	zb63f11.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 308301 3'.
RC_H17550_at	ym41h05.s1 Homo sapiens cDNA clone 50842 3'.
RC_N36835_at	yy35f02.s1 Homo sapiens cDNA clone 273243 3'.
RC_T35289_at	EST82492 Homo sapiens cDNA 3' end similar to None.
RC_AA447977_s_at	zw82e09.s1 Soares testis NHT Homo sapiens cDNA clone 782728 3'.
RC_AA160879_at	zo62h06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591515 3'.
RC_W45051_at	zc21g08.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 323006 3'.
RC_AA040699_at	zk48g04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486102 3'.
RC_R63734_at	yi15g05.s1 Homo sapiens cDNA clone 139352 3'.
RC_T61475_at	yc06h08.s1 Homo sapiens cDNA clone 79935 3'.
H23847_at	yn71d04.r1 Homo sapiens cDNA clone 173863 5'.
RC_AA482014_at	zu98d05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:746025 3' similar to TR:G414993 G414993 CENTRIN. ;.
RC_AA143323_s_at	zo37d04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589063 3' similar to gb:M60483_rna1 PROTEIN PHOSPHATASE PP2A-ALPHA, CATALYTIC SUBUNIT (HUMAN);.
R55902_at	yg92d05.r1 Homo sapiens cDNA clone 41017 5'.
RC_AA035638_at	zk28a05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471824 3'.
AA263146_at	PMY0511 KG1a Lambda Zap Express cDNA Library



	Homo sapiens cDNA 5'.
RC_W19222_at	zb89h05.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310809 3' similar to contains Alu repetitive element; contains element L1 repetitive element ;.
RC_AA262276_at	zs25f07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686245 3'.
H61361_s_at	yu41b03.r1 Homo sapiens cDNA clone 236333 5'.
RC_R10657_s_at	yf31e11.s1 Homo sapiens cDNA clone 128492 3'.
RC_AA227261_at	zr22h04.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664183 3'.
RC_AA477641_at	zu37b12.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 740159 3'.
RC_T70596_at	yd15f10.s1 Homo sapiens cDNA clone 108331 3'.
R31641_at	yh69e02.r1 Homo sapiens cDNA clone 135002 5'.
RC_N62855_at	yz83c04.s1 Homo sapiens cDNA clone 289638 3'.
RC_AA279695_at	zs92d10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704947 3'.
RC_H95071_s_at	yv20f02.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 243291 3'.
RC_N54385_at	yv39f05.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 245121.3'.
H15314_at	ym28c02.r1 Homo sapiens cDNA clone 49413 5'.
RC_AA151435_at	zl43h11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504741 3'.
RC_F01568_at	H. sapiens partial cDNA sequence; clone c-06g08.

or a sequence as identified below

RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
RC_W44745_at	zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.
AA482319_f_at	ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.
RC_AA155820_at	zo47a08.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590006 3'.
H51340_at	yo30c06.r1 Homo sapiens cDNA clone 179434 5'.
RC_H09594_at	yl97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_N29764_at	yw91b09.s1 Homo sapiens cDNA clone 259577 3'.
R80048_at	yi91e08.r1 Homo sapiens cDNA clone 146630 5'.
AC000115_cds1_at	WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.
RC_AA100437_at	zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clo-

	ne IMAGE:823998 5'.
RC_R39869_at	yf63b06.s1 Homo sapiens cDNA clone 26725 3'.
RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA196790_at	zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.
RC_R39923_at	yf51d10.s1 Homo sapiens cDNA clone 25662 3'.
RC_R91819_at	yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.
AA484982_at	aa39b02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815595 5'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.
RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.
RC_AA166810_at	zo87a05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593840 3'.
RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
AA046674_at	zf12d12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376727 5'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.
RC_AA243721_at	zr68f11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668589 3'.
RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_N29345_at	yw85c10.s1 Homo sapiens cDNA clone 259026 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA156187_at	zo47c04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590022 3' similar to contains Alu repetitive element;.
RC_AA157340_at	zo42h04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589591 3'.
RC_AA343514_at	EST49299 Gall bladder I Homo sapiens cDNA 3' end.
RC_AA482224_f_at	ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'..
RC_AA053021_at	zl72f02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510171 3'.
RC_AA279420_at	zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.

RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.
RC_N31597_s_at	yy20b11.s1 Homo sapiens cDNA clone 271773 3'.
U31875_at	Human Hep27 protein mRNA, complete cds.
RC_F04611_at	H. sapiens partial cDNA sequence; clone c-zse11.
AA263032_s_at	PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
AA447052_at	zw86b06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783827 5' similar to TR:G595950 G595950. PROTEIN N-TERMINAL ASPARAGINE AMIDOHYDROLASE. ;.
RC_AA056247_at	zf62c02.s1 Soares retina N2b4HR Homo sapiens cDNA clone 381506 3' similar to contains Alu repetitive element;.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_AA456039_at	aa03d01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812161 3'.
RC_AA461444_at	zx68b01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796585 3'.
RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
RC_AA034365_at	zf02b10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375739 3' similar to gb:J05096_rna1 SODIUM/POTASSIUM-TRANSPORTING ATPASE ALPHA-1 CHAIN (HUMAN);contains Alu repetitive element;.
RC_N22115_s_at	yw32a09.s1 Homo sapiens cDNA clone 253912 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.
AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
AA428172_f_at	zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.
C01790_at	HUMGS0003746, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.
RC_AA026270_at	ze97f07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366949 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_H60595_s_at	yr41h02.s1 Homo sapiens cDNA clone 207891 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_N91023_at	zb41a09.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 306136 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_T51995_at	yb29e09.s1 Homo sapiens cDNA clone 72616 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA

	clone 811831 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.
RC_AA609614_at	af15f12.s1 Soares testis NHT Homo sapiens cDNA clone 1031759 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.
AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_Z39652_at	H. sapiens partial cDNA sequence; clone c-1fg03.
AB002321_at	Human mRNA for KIAA0323 gene, partial cds.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.
RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.
RC_AA450373_at	zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.
U77942_at	Human syntaxin 7 mRNA, complete cds.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.

RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.
RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPIDERMAL GROWTH FACTOR RECEPTOR KINASE SUBSTRATE. ;.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR ;.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.
RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
AA147510_s_at	zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8. [1] ;.
AA091412_s_at	ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.

AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 50. A method of determining an expression pattern of a bladder cell sample, comprising:

collecting sample comprising bladder cells and/or expression products from bladder cells,

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determining the expression level of at least one gene in the sample, wherein at least one gene belongs to a first group of genes, said gene from the first gene group being expressed in a higher amount in normal tissue than in biological condition cells, and/or wherein at least one other gene belongs to a second group of genes, said gene from the second gene group being expressed in a lower amount in normal tissue than in biological condition cells, and the difference between the expression level of the first gene group in normal cells and biological condition cells being at least two-fold, obtaining an expression pattern of the bladder cell sample.

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51. The method according to claim 50, wherein the expression level of at least two genes are determined.

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52. The method according to claim 50, wherein the expression level of at least three genes are determined.

53. The method according to claim 50, wherein the expression level of at least four genes are determined.

54. The method according to claim 50, wherein the expression level of at least five genes are determined.
- 5 55. The method according to claim 50, wherein the expression level of more than six genes are determined.
56. The method of claims 50-55, wherein the genes exclude genes which are expressed in the submucosal, muscle, or connective tissue, whereby a pattern of  
10 expression is formed for the sample which is independent of the proportion of submucosal, muscle, or connective tissue cells in the sample.
57. The method of claim 56, comprising determining the expression level of one or more genes in the sample comprising predominantly submucosal, muscle, and  
15 connective tissue cells, obtaining a second pattern, subtracting said second pattern from the expression pattern of the bladder cell sample, forming a third pattern of expression, said third pattern of expression reflecting expression of the bladder mucosa or bladder cancer cells independent of the proportion of submucosal, muscle, and connective tissue cells present in the sample.
- 20 58. The method of any of the preceding claims 50-55, wherein the sample is a biopsy of the tissue.
59. The method according to any of the preceding claim 50-58, wherein the sample  
25 is a cell suspension.
60. The method according to any of the preceding claims 50-59, wherein the sample comprises substantially only cells from said tissue.
- 30 61. The method according to claim 60, wherein the sample comprises substantially only cells from mucosa.
62. The method according to any of the claims 50-59, wherein the gene from the  
35 first gene group is selected individually from

AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CATHEPSIN ;.
AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5' end.
AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to contains element TAR1 repetitive element ;.
C01409_s_at	HUMGS0008391, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA256485_at	zr81e12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682126 3'.
RC_AA290679_at	zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;.
RC_AA429655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.
RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.
RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.
RC_AA491463_at	ab01d12.s1. Stratagene fetal retina 937202 Homo sapiens cDNA clone 839543 3'.
RC_AA025434_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.
RC_AA026030_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to PIR:A48764 A48764 calpain ;.
RC_AA054321_s_at	zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.
RC_AA099820_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.
RC_AA161043_at	zo74g11.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592676 3'.
RC_AA215379_at	zr97c07.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.
RC_H09281_at	yl98f11.s1 Homo sapiens cDNA clone 46316 3'.
RC_H18836_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.
RC_H52937_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.
RC_H69547_at	yr89e02.s1 Homo sapiens cDNA clone 212474 3'.
RC_H95039_at	yv20a05.s1 Homo sapiens cDNA clone 243248 3'.
RC_N21687_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.
RC_N54841_at	yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248345 3'.
RC_N59622_at	yv74b06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248435 3'.
RC_N66312_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.
RC_N90717_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.



RC_R22189_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.
RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 39835 3'.
RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.
RC_W86375_s_at	zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.
RC_Z38289_at	H. sapiens partial cDNA sequence; clone c-05e04.

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 63. The method according to claim 62 wherein the gene from the first gene group is selected individually from genes comprising a sequence as identified below

RC_AA621122_at	af34f04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 1033567 3'.
RC_AA129216_at	zn84b03.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 564845 3'.
RC_AA133214_s_at	zk97h05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490809 3'.
RC_H99675_at	yx35c02.s1 Homo sapiens cDNA clone 263714 3'.
RC_R87160_at	yq31h10.s1 Homo sapiens cDNA clone 197443 3'.

10 18). wherein the notation refers to Accession No. in the database UniGene (Build

64. The method according to claim 63, wherein the gene from the first gene group is selected individually from genes comprising a sequence as identified below

RC_AA429904_at	zw66d03.s1 Soares testis NHT Homo sapiens cDNA clone 781157 3'.
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15 18). wherein the notation refers to Accession No. in the database UniGene (Build

- 20 65. The method according to claim 64, wherein the gene from the first gene group is selected individually from genes comprising a sequence as identified below

RC_AA460273_at	zx67f05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796545 3'.
RC_AA490930_at	aa46e04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 3'.

RC_AA418072_at	zv97g08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767774 3'.
RC_H61476_s_at	yr17e08.s1 Homo sapiens cDNA clone 205574 3'.
RC_H16209_at	yl28d11.s1 Homo sapiens cDNA clone 159573 3'.
RC_N93816_at	zb63f11.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 308301 3'.
RC_H17550_at	ym41h05.s1 Homo sapiens cDNA clone 50842 3'.
RC_N36835_at	yy35f02.s1 Homo sapiens cDNA clone 273243 3'.
RC_T35289_at	EST82492 Homo sapiens cDNA 3' end similar to None.
RC_AA447977_s_at	zw82e09.s1 Soares testis NHT Homo sapiens cDNA clone 782728 3'.
RC_AA160879_at	zo62h06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591515 3'.
RC_W45051_at	zc21g08.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 323006 3'.
RC_AA040699_at	zk48g04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486102 3'.
RC_R63734_at	yi15g05.s1 Homo sapiens cDNA clone 139352 3'.
RC_T61475_at	yc06h08.s1 Homo sapiens cDNA clone 79935 3'.
H23847_at	yn71d04.r1 Homo sapiens cDNA clone 173863 5'.
RC_AA482014_at	zu98d05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:746025 3' similar to TR:G414993 G414993 CEN-TRIN. ;.
RC_AA143323_s_at	zo37d04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589063 3' similar to gb:M60483_rna1 PROTEIN PHOSPHATASE PP2A-ALPHA, CATALYTIC SUBUNIT (HUMAN);.
R55902_at	yg92d05.r1 Homo sapiens cDNA clone 41017 5'.
RC_AA035638_at	zk28a05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471824 3'.
AA263146_at	PMY0511 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
RC_W19222_at	zb89h05.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310809 3' similar to contains Alu repetitive element; contains element L1 repetitive element ;.
RC_AA262276_at	zs25f07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686245 3'.
H61361_s_at	yu41b03.r1 Homo sapiens cDNA clone 236333 5'.
RC_R10657_s_at	yf31e11.s1 Homo sapiens cDNA clone 128492 3'.
RC_AA227261_at	zr22h04.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664183 3'.
RC_AA477641_at	zu37b12.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 740159 3'.
RC_T70596_at	yd15f10.s1 Homo sapiens cDNA clone 108331 3'.
R31641_at	yh69e02.r1 Homo sapiens cDNA clone 135002 5'.
RC_N62855_at	yz83c04.s1 Homo sapiens cDNA clone 289638 3'.
RC_AA279695_at	zs92d10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704947 3'.
RC_H95071_s_at	yv20f02.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 243291 3'.
RC_N54385_at	yv39f05.s1 Soares fetal liver spleen 1NFLS Homo sapiens

	cDNA clone 245121 3'.
H15314_at	ym28c02.r1 Homo sapiens cDNA clone 49413 5'.
RC_AA151435_at	zl43h11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504741 3'.
RC_F01568_at	H. sapiens partial cDNA sequence; clone c-06g08.

or a sequence as identified below

RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
RC_W44745_at	zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.
AA482319_f_at	ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.
RC_AA155820_at	zo47a08.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590006 3'.
H51340_at	yo30c06.r1 Homo sapiens cDNA clone 179434 5'.
RC_H09594_at	yl97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_N29764_at	yw91b09.s1 Homo sapiens cDNA clone 259577 3'.
R80048_at	yi91e08.r1 Homo sapiens cDNA clone 146630 5'.
AC000115_cds1_at	WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.
RC_AA100437_at	zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.
RC_R39869_at	yf63b06.s1 Homo sapiens cDNA clone 26725 3'.
RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA196790_at	zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.
RC_R39923_at	yf51d10.s1 Homo sapiens cDNA clone 25662 3'.
RC_R91819_at	yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.
AA484982_at	aa39b02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815595 5'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.
RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.
RC_AA166810_at	zo87a05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593840 3'.

RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
AA046674_at	zf12d12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376727 5'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.
RC_AA243721_at	zr68f11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668589 3'.
RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_N29345_at	yw85c10.s1 Homo sapiens cDNA clone 259026 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA156187_at	zo47c04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590022 3' similar to contains Alu repetitive element;.
RC_AA157340_at	zo42h04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589591 3'.
RC_AA343514_at	EST49299 Gall bladder I Homo sapiens cDNA 3' end.
RC_AA482224_f_at	ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.
RC_AA053021_at	zl72f02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510171 3'.
RC_AA279420_at	zs85d09.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.
RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.
RC_N31597_s_at	yy20b11.s1 Homo sapiens cDNA clone 271773 3'.
U31875_at	Human Hep27 protein mRNA, complete cds.
RC_F04611_at	H. sapiens partial cDNA sequence; clone c-zse11.
AA263032_s_at	PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
AA447052_at	zw86b06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783827 5' similar to TR:G595950 G595950 PROTEIN N-TERMINAL ASPARAGINE AMIDOHYDROLASE. ;.
RC_AA056247_at	zf62c02.s1 Soares retina N2b4HR Homo sapiens cDNA clone 381506 3' similar to contains Alu repetitive element;.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_AA456039_at	aa03d01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812161 3'.
RC_AA461444_at	zx68b01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796585 3'.
RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
RC_AA034365_at	zf02b10.s1 Soares fetal heart NbHH19W Homo sapiens

	cDNA clone 375739 3' similar to gb:J05096_rna1 SODIUM/POTASSIUM-TRANSPORTING ATPASE ALPHA-1 CHAIN (HUMAN);contains Alu repetitive element;.
RC_N22115_s_at	yw32a09.s1 Homo sapiens cDNA clone 253912 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.
AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
AA428172_f_at	zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.
C01790_at	HUMGS0003746, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.
RC_AA026270_at	ze97f07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366949 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_H60595_s_at	yr41h02.s1 Homo sapiens cDNA clone 207891 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_N91023_at	zb41a09.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 306136 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_T51995_at	yb29e09.s1 Homo sapiens cDNA clone 72616 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.
RC_AA609614_at	af15f12.s1 Soares testis NHT Homo sapiens cDNA clone 1031759 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.
AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_Z39652_at	H. sapiens partial cDNA sequence; clone c-1fg03.
AB002321_at	Human mRNA for KIAA0323 gene, partial cds.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.
RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor

	50kDa subunit, complete cds
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.
RC_AA450373_at	zx05h06.s1 Soares total.fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.
U77942_at	Human syntaxin 7 mRNA, complete cds.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.
RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.
RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPI- DERMAL GROWTH FACTOR RECEPTOR KINASE SUB- STRATE. ;.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVA- TOR ;.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapi- ens cDNA clone 428116 3'.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.

RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
AA147510_s_at	zi50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANS-CRIPTIONAL REGULATOR SPO8. [1] ;.
AA091412_s_at	li2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.
AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;.
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;.
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 66. The method according to any of claims 4-14, wherein the second gene group are selected individually from genes comprising a sequence as identified below

RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.
RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230 Ho-

	mo sapiens cDNA clone 564116 3' similar to contains Alu repetitive element;.
RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.
RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 67. The method according to any of claims 40-61, wherein the second gene group are selected individually from genes comprising a sequence as identified below

AA402119_at	zu55d04,r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA, ;,
RC_AA102581_at	zn42d02,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550083 3',
RC_H14089_at	ym62c07,s1 Homo sapiens cDNA clone 163500 3',
RC_R46079_f_at	yg49c02,s1 Homo sapiens cDNA clone 36133 3',
RC_R67918_at	yi25g01,s1 Homo sapiens cDNA clone 140304 3',
RC_W15360_at	zc17d10,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;,
AA082171_at	zn42g07,r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5',
AA425593_at	zw48f02,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5',
F15201_at	H, sapiens partial cDNA sequence,
H15219_at	ym30f02,r1 Homo sapiens cDNA clone 49693 5',
R60368_at	yh04b02,r1 Homo sapiens cDNA clone 42052 5',
R86859_at	ym86a02,r1 Homo sapiens cDNA clone 165770 5',
RC_AA045342_at	zk59g01,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3',
RC_AA171985_at	zo98g05,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3',
T63174_s_at	yc04e08,r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element;.
U90268_at	Human Krit1 mRNA, complete cds,
X14787_at	Human mRNA for thrombospondin
RC_AA196991_s_at	zq10a10,s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, ;,
RC_F02470_at	H, sapiens partial cDNA sequence; clone c-10c01,
RC_F08899_at	H, sapiens partial cDNA sequence; clone c-2uc10,
RC_H15259_at	ym30c10,s1 Homo sapiens cDNA clone 49795 3',
RC_H52133_at	yo44d04,s1 Homo sapiens cDNA clone 180775 3',
RC_R17059_at	yf45a10,s2 Homo sapiens cDNA clone 129786 3',
RC_R45292_at	yg46b01,s1 Homo sapiens cDNA clone 35626 3',



wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 68. The method according to any of claims 40-61, wherein the second gene group are selected individually from genes comprising a sequence as identified below

C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,
D80002_at	Human mRNA for KIAA0180 gene, partial cds
RC_AA149586_at	zl39e03,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3',
RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',
RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',
RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',
RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element,,
RC_R46206_at	yj53d08,s1 Homo sapiens cDNA clone 152463 3',
RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38554 3',
AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',
AB002346_at	Human mRNA for KIAA0348 gene, complete cds,
D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,
M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds
N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',
RC_AA149044_at	zl45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',
RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',
RC_AA281743_r_at	zt06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',
RC_AA406338_at	zv10f06,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',
RC_AA424524_at	zv90g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',
RC_AA435840_at	zt80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',
RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',
RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',
RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',
RC_AA148923_at	zl27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',
RC_H98653_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',
RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',
RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',

RC_T90374_at	yd43e03,s1 Homo sapiens cDNA clone 111004 3' similar to SP:POL2_MOUSE P11369 RETROVIRUS-RELATED POL POLYPROTEIN ;,
RC_Z38182_at	H, sapiens partial cDNA sequence; clone c-02a08,

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 69. The method according to any of claims 40-61, wherein the second gene group comprises a sequence as identified below

RC_AA054726_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	zq77f02,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',
AA115572_s_at	zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',
RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains Alu repetitive element;contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',
RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone

	IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',
S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;,,
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',
RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,

or a sequence as identified below

AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',
RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',
RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens

RC_AA197311_s_at	cDNA clone 587858 3', zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 IN-TERCELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',
AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTC DL1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',
AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',
RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zl74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;,,
RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;,
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',
RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',
RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens

	cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 ;,,
RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;,,
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3',
RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zl40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',
RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);,,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;,,

wherein the notation refers to Accession No. in the database UniGene (Build 18).

70. The method according to any of the claims 40-69, wherein the expression level of at least one gene from the first gene group are determined.
- 5 71. The method according to any of the claims 40-69, wherein the expression level of at least two genes from the first gene group are determined.
72. The method according to any of the claims 40-69, wherein the expression level of at least three genes from the first gene group are determined.
- 10 73. The method according to any of the claims 40-69, wherein the expression level of at least four genes from the first gene group are determined.
74. The method according to any of the claims 40-69, wherein the expression level of at least five genes from the first gene group are determined.
- 15 75. The method according to any of the claims 40-69, wherein the expression level of more than six genes from the first gene group are determined.
76. The method according to any of the preceding claims 40-75, wherein the expression level of at least one gene from the second gene group are determined.
- 20 77. The method according to any of the preceding claims 40-75, wherein the expression level of at least two genes from the second gene group are determined.
- 25 78. The method according to any of the preceding claims 40-75, wherein the expression level of at least three genes from the second gene group are determined.
79. The method according to any of the preceding claims 40-75, wherein the expression level of at least four genes from the second gene group are determined.
- 30 80. The method according to any of the preceding claims 40-75, wherein the expression level of at least five genes from the second gene group are determined.
- 35

81. The method according to any of the preceding claims 40-75, wherein the expression level of more than six genes from the second gene group are determined.
- 5 82. A method of determining an expression pattern of a bladder cell sample independent of the proportion of submucosal, muscle, or connective tissue cells present, comprising:
- 10 determining the expression of one or more genes in a sample comprising cells, wherein the one or more genes exclude genes which are expressed in the submucosal, muscle, or connective tissue, whereby a pattern of expression is formed for the sample which is independent of the proportion of submucosal, muscle, or connective tissue cells in the sample.
- 15 83. The method according to claim 57, comprising determining the expression level of one or more genes in the sample comprising predominantly submucosal, muscle, and connective tissue cells, obtaining a second pattern, subtracting said second pattern from the expression pattern of the bladder cell sample, forming a third pattern of expression, said third pattern of expression reflecting expression
- 20 of the bladder cells independent of the proportion of submucosal, muscle, and connective tissue cells present in the sample.
- 25 84. A method of determining the presence or absence of a biological condition in human bladder tissue comprising,
- collecting a sample comprising cells from the tissue,
- determining an expression pattern of the cells as defined in any of claims 57-60,
- 30 correlating the determined expression pattern to a standard pattern,
- determining the presence or absence of the biological condition of said tissue.
- 35 85. A method for determining the stage of a biological condition in animal tissue comprising,

collecting a sample comprising cells from the tissue,

determining an expression pattern of the cells as defined in any of claims 40-58,

5 correlating the determined expression pattern to a standard pattern,

determining the stage of the biological condition is said tissue.

86. A method for reducing cell tumorigenicity or malignancy of a cell, said method  
10 comprising

contacting a tumor cell with at least one peptide expressed by at least one gene  
selected from genes being expressed in an at least two-fold higher amount in  
normal cells than the amount expressed in said tumor cell.

15

87. The method according to claim 86, wherein the at least one gene is selected  
individually from genes comprising a sequence as identified below

RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
RC_H42123_at	yo61a11.s1 Homo sapiens cDNA clone 182396 3'.
RC_Z39200_at	H. sapiens partial cDNA sequence; clone c-13f02.
RC_N21687_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.
Y13645_at	Homo sapiens mRNA for uroplakin II.
RC_N98461_at	zb86b03.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310445 3'.
RC_W92449_at	zd99d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 357619 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.
RC_T40767_at	ya11a06.s1 Homo sapiens cDNA clone 61138 3'.
RC_T51972_at	yb29c05.s1 Homo sapiens cDNA clone 72584 3'.
RC_AA286862_at	zs58b06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone



RC_AA293533_i_at	zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);.
RC_AA100649_at	zn63g10.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 562914 3' similar to SW:LCFA_ECOLI P29212 LONG-CHAIN-FATTY-ACID--COA LIGASE ;.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA180054_at	zp40g07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 611964 3'.
AA263032_s_at	PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
W69310_at	zd46f07.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343717 5'.
RC_AA219653_at	zr05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.
RC_AA457235_at	aa91c07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838668 3'.
RC_AA455967_at	aa16h10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813475 3'.
N27670_at	yx51a09.r1 Homo sapiens cDNA clone 265240 5'.
RC_N80152_at	za65e02.s1 Homo sapiens cDNA clone 297434 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA147218_s_at	zo64g03.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591700 3'.
C01139_at	HUMGS0007818, Human Gene Signature, 3'-directed cDNA sequence.
AA285284_at	PMY0691 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.

RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA479096_at	zv17e07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753924 3'.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.
RC_T03927_at	seq2490 Homo sapiens cDNA clone 3HFLSK20-87 3'.
AA314457_at	EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.
RC_AA191524_at	zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.
RC_N29740_at	yw90b12.s1 Homo sapiens cDNA clone 259487 3'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.
RC_AA404487_at	zw38a06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772306 3'.
RC_H16666_at	ym26a10.s1 Homo sapiens cDNA clone 49155 3'.
RC_AA406197_at	zv24d11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754581 3'.
RC_H09594_at	yl97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PRO-STATIC ACID PHOSPHATASE PRECURSOR ;.
RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_AA293533_f_at	zt54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);.
RC_AA398197_at	zt59a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'.

AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
RC_AA236356_at	zr54a11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 667196 3'.
W92678_at	zd92a04.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 356910 5' similar to contains element LTR3 repetitive element ;.
RC_N63332_at	yz33d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element;.
C16281_s_at	Human aorta cDNA 5'-end GEN-259H09.
RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.
H88035_s_at	yw20e07.r1 Homo sapiens cDNA clone 252804 5'.
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_R45698_at	yg45h12.s1 Homo sapiens cDNA clone 35838 3'.
RC_AA236542_at	zr75g11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669284 3'.
AA376875_at	EST89388 Small intestine I Homo sapiens cDNA 5' end similar to monoamine oxidase A.
RC_R43365_at	yg15g06.s1 Homo sapiens cDNA clone 32365 3'.
RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_AA057620_at	zf15h06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377051 3'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.
RC_AA598872_at	ae37b10.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897979 3'.
RC_AA147646_s_at	zl52g06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505594 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.

RC_N54365_at	yv39c06.s1 Homo sapiens cDNA clone 245098 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
AA046593_at	zk62g01.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487440 5'.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.
RC_AA256273_at	zr81c12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682102 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.
RC_AA086005_at	zl84c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'.
RC_AA479885_at	zw44a07.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772884 3'.
AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HY- POTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
R15268_at	yf89f02.r1 Homo sapiens cDNA clone 29665 5'.
RC_AA443658_at	zw86a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783834 3' similar to TR:G438639 G438639 LAMIN B RE- CEPTOR. [1] ;.
RC_H16790_at	ym39b01.s1 Homo sapiens cDNA clone 50559 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
AB002321_at	Human mRNA for KIAA0323 gene, partial cds.
RC_Z38810_at	H. sapiens partial cDNA sequence; clone c-0qb09.
AC000115_cds1_	WUGSC:H_GS188P18.1a gene extracted from Human BAC

at	clone GS188P18
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
AA309880_at	EST180743 Jurkat T-cells V Homo sapiens cDNA 5' end.
RC_R43812_at	yg21a08.s1 Homo sapiens cDNA clone 32940 3'.
RC_AA425636_at	zv47a04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756750 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_AA279420_at	zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;.
RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
AF007216_at	Homo sapiens sodium bicarbonate cotransporter (HNBC1) mRNA, complete cds.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
D79601_f_at	Human aorta cDNA 5'-end GEN-286G10.
RC_N30856_at	yw70f05.s1 Homo sapiens cDNA clone 257601 3'.
L29218_s_at	Homo sapiens clk2 mRNA, complete cds
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPI- DERMAL GROWTH FACTOR RECEPTOR KINASE SUBSTRATE. ;.
AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
RC_AA252765_at	zs27d03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.
RC_W46846_at	zc36a04.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324366 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA

	clone 588080 3'.
RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_N52565_at	yv36d12.s1 Homo sapiens cDNA clone 244823 3'.
RC_W32506_s_at	zc06a02.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321482 3'.
RC_AA255539_at	zr85c04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682470 3'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.
AA091278_at	cchn2404.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.
AA091412_s_at	ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA046865_at	zf12b09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376697 5'.
AA324825_at	EST27743 Cerebellum II Homo sapiens cDNA 5' end.
RC_AA454840_s_at	zx79d09.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 809969 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_AA402484_at	zt65c03.s1 Soares testis NHT Homo sapiens cDNA clone 727204 3'.
W26883_at	15h10 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
RC_AA121360_s_at	zn77a05.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564176 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A)

	mRNA, complete cds.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.
H18718_at	ym45b05.r1 Homo sapiens cDNA clone 51043 5' similar to contains Alu repetitive element;.
RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_R67996_at	yi04c10.s1 Homo sapiens cDNA clone 138258 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_F11115_at	H. sapiens partial cDNA sequence; clone c-33a10.
RC_R08871_at	yf21e07.s1 Homo sapiens cDNA clone 127524 3'.
RC_AA224324_at	zr12e05.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648608 3'.
RC_AA399226_at	zt50c01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725760 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.
RC_AA464240_s_at	zx81a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810128 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
RC_AA029288_at	zk10b03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470093 3' similar to PIR:H45193 H45193 zinc finger protein ZNF65 ;..
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR ;.
J04813_s_at	Human cytochrome P450 PCN3 gene, complete cds
RC_AA465093_at	aa32h08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815007 3'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA

	CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA256680_at	zr82h09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682241 3'.
AA147510_s_at	zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
R78119_at	yi80c10.r1 Homo sapiens cDNA clone 145554 5'.
RC_Z38407_s_at	H. sapiens partial cDNA sequence; clone c-0ac03.
RC_AA287107_s_at	zs58f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701711 3'.
RC_AA287042_at	zs57e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701604 3'.
AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA402622_at	zu47g07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741180 3'.
RC_AA436628_at	zw55e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773994 3'.
RC_AA282138_at	zt02a10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711930 3'.
AA045870_at	zk75a04.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488622 5'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTI-ONAL REGULATOR SPO8. [1];.
RC_AA609210_at	af12f04.s1 Soares testis NHT Homo sapiens cDNA clone 1031455 3'.
RC_AA133469_at	zo13e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 586796 3'.



R22139_at	yh25b11.r1 Homo sapiens cDNA clone 130749 5'.
AA305116_at	EST176117 Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA026397_at	ze92d07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366445 3'.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.
H89575_s_at	yw28c11.r1 Homo sapiens cDNA clone 253556 5'.
RC_AA251003_at	zs07g11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684548 3'.
RC_AA279408_at	zs84h09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704225 3'.
RC_AA281760_at	zt07g10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712482 3' similar to TR:G808826 G808826 HYPOTHETICAL 25.7 KD PROTEIN. ;.
AB002381_at	Human mRNA for KIAA0383 gene, partial cds.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;.
RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
T94506_at	ye36a05.r1 Homo sapiens cDNA clone 119792 5'.
D55869_s_at	Human fetal brain cDNA 5'-end GEN-404F02.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds
U77942_at	Human syntaxin 7 mRNA, complete cds.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.

RC_AA194045_at	zr38c08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665678 3'.
RC_AA025104_at	ze78f05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365121 3'.
RC_AA242822_at	zr65e09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668296 3'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA489383_at	ab41e08.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 843398 3'.
RC_AA621188_at	zu81a08.s1 Soares testis NHT Homo sapiens cDNA clone 744374 3'.
RC_AA486182_at	ab35a01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842760 3'.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
RC_AA024866_at	ze79b09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365177 3'.
RC_AA450373_at	zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.
N78483_at	yz78d07.r1 Homo sapiens cDNA clone 289165 5'.
RC_AA281245_at	zs94d07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705133 3'.
W52431_at	zc45b12.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN. [2] PIR:S07807 ;.
RC_AA446597_at	zw84f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783673 3'.
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.

X73501_at	H.sapiens gene for cytokeratin 20
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;.

or from a sequence as identified below

AB002370_at	Human mRNA for KIAA0372 gene, complete cds.
AF000546_at	Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.
H43922_at	yo70c03.r1 Homo sapiens cDNA clone 183268 5'.
H44269_at	yp17b05.r1 Homo sapiens cDNA clone 187665 5' similar to contains Alu repetitive element;.
H88706_s_at	yw23e08.r1 Homo sapiens cDNA clone 253094 5'.
L25880_s_at	Homo sapiens epoxide hydrolase (EPHX) gene, complete cds
N81162_at	yw36d01.r1 Homo sapiens cDNA clone 254305 5'.
RC_F10381_s_at	H. sapiens partial cDNA sequence; clone c-3ec07.
RC_H54558_at	EST00018 HE6W Homo sapiens cDNA clone HE6WCR108 3'.
RC_H58692_s_at	yr20g08.s1 Homo sapiens cDNA clone 205886 3' similar to SP:FTDH_RAT P28037 FORMYLTETRAHYDROFOLATE DEHYDROGENASE ;.
RC_N20047_at	yx28d06.s1 Homo sapiens cDNA clone 263051 3'.
RC_N38810_at	yv28e04.s1 Homo sapiens cDNA clone 244062 3'.
RC_R46497_at	yg51h01.s1 Homo sapiens cDNA clone 36305 3'.
RC_R55001_at	yj76a08.s1 Homo sapiens cDNA clone 154646 3'.
RC_T29986_s_at	EST10130 Homo sapiens cDNA 3' end similar to None.
RC_T30214_at	EST12901 Homo sapiens cDNA 3' end similar to None.
RC_T40438_at	ya01c07.s2 Homo sapiens cDNA clone 60204 3'.
RC_W51910_at	zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.
RC_W73949_at	zd71f09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 346121 3'.
RC_W86375_s_at	zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.
RC_Z38289_at	H. sapiens partial cDNA sequence; clone c-05e04.

RC_Z38807_s_at	H. sapiens partial cDNA sequence; clone c-0qb04.
RC_Z39599_at	H. sapiens partial cDNA sequence; clone c-1ed10.
RC_AA025351_at	ze74h03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364757 3' similar to contains OFR.t1 OFR repetitive element ;.
RC_AA136474_at	zl01f04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491071 3'.
RC_AA136611_at	zk99b02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490923 3'.
RC_AA233375_at	zr48f07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666661 3'.
RC_AA235621_s_at	zt36c05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724424 3'.
RC_AA253331_at	zr72g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668978 3'.
RC_AA393793_at	zv64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758394 3'.
RC_AA419547_at	zv04a05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752624 3'.
RC_AA421100_at	zu27d11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739221 3'.
RC_AA443277_at	zw87f06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783971 3'.
RC_AA446570_at	zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.
RC_AA447123_at	zw93c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784512 3'.
RC_AA449343_at	zx06g09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785728 3'.
RC_AA456016_at	aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.
RC_AA479299_at	zv21f04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754303 3'.
RC_AA479350_at	zv17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone

	753905 3' similar to contains element TAR1 TAR1 repetitive element ;.
U85707_at	Human leukemogenic homolog protein (MEIS1) mRNA, complete cds
U94831_at	Human multispinning membrane protein mRNA, complete cds. /gb=U94831 /ntype=RNA
W27827_at	38c8 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.
W81301_at	zd85a12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347422 5'.
Y12711_at	H.sapiens mRNA for putative progesterone binding protein
AA074407_at	zm15c08.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 525710 5'.
AA091017_at	yy1646.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA104023_at	l7134.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA171913_at	zo95d05.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594633 5'.
AA195678_at	zr32h05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 665145 5'.
AA227678_at	zr55e05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 667328 5'.
AA247204_at	csg0306.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
AA479995_at	zv18b05.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753969 5'.

or from a sequence as identified below

RC_H14633_at	yl26e06.s1 Homo sapiens cDNA clone 159394 3'.
RC_N62506_at	yz74d02.s1 Homo sapiens cDNA clone 288771 3'.
RC_N70481_at	za74g10.s1 Homo sapiens cDNA clone 298338 3'.
RC_N73988_at	za57b06.s1 Homo sapiens cDNA clone 296627 3'.

RC_T53404_at	ya88g06.s1 Homo sapiens cDNA clone 68794 3'.
RC_Z38149_at	H. sapiens partial cDNA sequence; clone c-01a09.
RC_Z38849_at	H. sapiens partial cDNA sequence; clone c-0rb11.
RC_AA037409_at	zc03h03.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321269 3'.
RC_AA084318_at	zn18b04.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547759 3'.
RC_AA126419_at	zk94d04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490471 3'.
RC_AA128407_at	zm24d04.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526567 3'.
RC_AA173430_at	zp02e08.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595238 3'.
RC_AA398104_at	zt58d03.s1 Soares testis NHT Homo sapiens cDNA clone 726533 3'.
RC_AA399414_at	zt50e07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725796 3'.
RC_AA431479_at	zw72f05.s1 Soares testis NHT Homo sapiens cDNA clone 781761 3'.
RC_AA436471_at	zv08e05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753056 3'.
RC_AA449455_at	zx05e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785610 3' similar to contains Alu repetitive element;.
RC_AA458899_at	zx88d07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810829 3'.
RC_AA463630_s_at	zx98g09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811840 3'.
RC_AA489009_at	aa54d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824757 3'.
W37319_at	zc11f08.r1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322023 5'.

or from a sequence as identified below

yx16e10.r1 Homo sapiens cDNA clone 261930 5'.	N24990_s_at
yf41e08.r1 Homo sapiens cDNA clone 129446 5' similar to SP:A46661 A46661 LEUKOTRIENE B4 OMEGA-HYDROXYLASE, P-450LTB OMEGA=CYTOCHROME P-450 SUPERFAMILY MEMBER - ;.	R11267_at
yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.	RC_H52937_at
yr89e02.s1 Homo sapiens cDNA clone 212474 3'.	RC_H69547_at
yu73c12.s1 Homo sapiens cDNA clone 239446 3'.	RC_H70047_at
yx99c11.s1 Homo sapiens cDNA clone 269876 3'.	RC_N24879_at
yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	RC_N66312_at
yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	RC_R22189_at
yg44f05.s1 Homo sapiens cDNA clone 35270 3'.	RC_R45582_at
yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	RC_R53457_at
yi49g10.s1 Homo sapiens cDNA clone 142626 3'.	RC_R70903_at
zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	RC_AA054321_s_at
zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	RC_AA099820_at
zl17g05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 3'.	RC_AA127238_at
zo64h02.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591699 3'.	RC_AA147224_at
zq12e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629498 3'.	RC_AA192765_at
zr33d07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 665197 3'.	RC_AA195718_at
zr28b08.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664695 3' similar to gb:L05779 SOLUBLE EPOXIDE HYDROLASE (HUMAN);.	RC_AA232114_s_at
zt07h12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712487 3'.	RC_AA281770_at
zw59e03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774364 3' similar to TR:G1199667 G1199667	RC_AA430209_at

PROTEIN KINASE C-BINDING PROTEIN ENIGMA ;.	
zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	RC_AA452410_at
aa39g12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815686 3'.	RC_AA485115_at
zk85e12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489646 5'.	AA099391_s_at
zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CA-THEPSIN ;.	AA131127_at
zp02c06.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595210 5' similar to SW:QRI2_YEAST P43124 HYPOTHETICAL 46.1 KD PROTEIN IN PHO2-POL3 INTERGENIC REGION. [1] ;.	AA173505_at
zt39b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724693 5'.	AA291786_s_at
zu53f10.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741739 5'.	AA402971_s_at

or from a sequence as identified below

Human mRNA for IgG Fc binding protein, complete cds	D84239_at
yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248345 3'.	RC_N54841_at
ya88f04.s1 Homo sapiens cDNA clone 68767 3'.	RC_T53389_s_at
ye30d12.s1 Homo sapiens cDNA clone 119255 3'.	RC_T98227_at
zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	RC_AA215379_at
zr81e12.s1 Soares NhHMPu-S1 Homo sapiens cDNA clone 682126 3'.	RC_AA256485_at
zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;.	RC_AA290679_at
zw46c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773088 3'.	RC_AA425309_at



zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.	RC_AA429655_at
aa90h11.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838629 3' similar to contains Alu repetitive element;.	RC_AA456981_at
zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	RC_AA461174_at
zd27g09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341920 5'.	W61377_at

wherein the notation refers to Accession No. in the database UniGene (Build 18).

5 88. The method according to claim 86 or 87, wherein the tumor cell is contacted with at least two different peptides.

89. A method for reducing cell tumorigenicity of a cell, said method comprising

10 obtaining at least one gene selected from genes being expressed in an at least two-fold higher amount in normal cells than the amount expressed in said tumor cell,

15 introducing said at least one gene into the tumor cell in a manner allowing expression of said gene(s).

90. The method according to claim 89, where the at least one gene is selected individually from genes comprising a sequence as identified below

RC_AA621122_at	af34f04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 1033567 3'.
RC_AA129216_at	zn84b03.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 564845 3'.
RC_AA133214_s_at	zk97h05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490809 3'.
RC_H99675_at	yx35c02.s1 Homo sapiens cDNA clone 263714 3'.
RC_R87160_at	yq31h10.s1 Homo sapiens cDNA clone 197443 3'.

20 or a sequence as identified below

RC_AA429904_at	zw66d03.s1 Soares testis NHT Homo sapiens cDNA clone 781157 3'.
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or a sequence as identified below

RC_AA460273_at	zx67f05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796545 3'.
RC_AA490930_at	aa46e04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 3'.
RC_AA418072_at	zv97g08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767774 3'.
RC_H61476_s_at	yr17e08.s1 Homo sapiens cDNA clone 205574.3'.
RC_H16209_at	yl28d11.s1 Homo sapiens cDNA clone 159573 3'.
RC_N93816_at	zb63f11.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 308301 3'.
RC_H17550_at	ym41h05.s1 Homo sapiens cDNA clone 50842 3'.
RC_N36835_at	yy35f02.s1 Homo sapiens cDNA clone 273243 3'.
RC_T35289_at	EST82492 Homo sapiens cDNA 3' end similar to None.
RC_AA447977_s_at	zw82e09.s1 Soares testis NHT Homo sapiens cDNA clone 782728 3'.
RC_AA160879_at	zo62h06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591515 3'.
RC_W45051_at	zc21g08.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 323006 3'.
RC_AA040699_at	zk48g04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486102 3'.
RC_R63734_at	yi15g05.s1 Homo sapiens cDNA clone 139352 3'.
RC_T61475_at	yc06h08.s1 Homo sapiens cDNA clone 79935 3'.
H23847_at	yn71d04.r1 Homo sapiens cDNA clone 173863 5'.
RC_AA482014_at	zu98d05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:746025 3' similar to TR:G414993 G414993 CEN-TRIN. ;.
RC_AA143323_s_at	zo37d04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589063 3' similar to gb:M60483_ma1 PROTEIN PHOSPHATASE PP2A-ALPHA, CATALYTIC SUBUNIT (HUMAN);.
R55902_at	yg92d05.r1 Homo sapiens cDNA clone 41017 5'.
RC_AA035638_at	zk28a05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471824 3'.
AA263146_at	PMY0511 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
RC_W19222_at	zb89h05.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310809 3' similar to contains Alu repetitive element;contains element L1 repetitive element ;.
RC_AA262276_at	zs25f07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686245 3'.
H61361_s_at	yu41b03.r1 Homo sapiens cDNA clone 236333 5'.
RC_R10657_s_at	yf31e11.s1 Homo sapiens cDNA clone 128492 3'.

RC_AA227261_at	zr22h04.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664183 3'.
RC_AA477641_at	zu37b12.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 740159 3'.
RC_T70596_at	yd15f10.s1 Homo sapiens cDNA clone 108331 3'.
R31641_at	yh69e02.r1 Homo sapiens cDNA clone 135002 5'.
RC_N62855_at	yz83c04.s1 Homo sapiens cDNA clone 289638 3'.
RC_AA279695_at	zs92d10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704947 3'.
RC_H95071_s_at	yv20f02.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 243291 3'.
RC_N54385_at	yv39f05.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 245121 3'.
H15314_at	ym28c02.r1 Homo sapiens cDNA clone 49413 5'.
RC_AA151435_at	zl43h11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504741 3'.
RC_F01568_at	H. sapiens partial cDNA sequence; clone c-06g08.

or a sequence as identified below

RC_AA451685_at	zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.
RC_W44745_at	zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.
AA482319_f_at	ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.
RC_AA155820_at	zo47a08.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590006 3'.
H51340_at	yo30c06.r1 Homo sapiens cDNA clone 179434 5'.
RC_H09594_at	yi97b11.s1 Homo sapiens cDNA clone 46276 3'.
RC_N29764_at	yw91b09.s1 Homo sapiens cDNA clone 259577 3'.
R80048_at	yi91e08.r1 Homo sapiens cDNA clone 146630 5'.
AC000115_cds1_at	WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18
AA203222_at	zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;.
RC_AA100437_at	zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.
RC_T51990_at	yb29e01.s1 Homo sapiens cDNA clone 72600 3'.
AA491114_at	aa46e04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.
RC_R39869_at	yf63b06.s1 Homo sapiens cDNA clone 26725 3'.
RC_AA394071_at	zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;.
RC_AA196790_at	zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.
AA465000_s_at	zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.

RC_R39923_at	yf51d10.s1 Homo sapiens cDNA clone 25662 3'.
RC_R91819_at	yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.
AA484982_at	aa39b02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815595 5'.
AA036900_at	zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'.
RC_AA449951_at	zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.
RC_Z40233_at	H. sapiens partial cDNA sequence; clone c-1wg05.
RC_AA166810_at	zo87a05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593840 3'.
RC_H06746_at	yl83h08.s1 Homo sapiens cDNA clone 44847 3'.
AA046674_at	zf12d12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376727 5'.
RC_AA450118_at	zx42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.
RC_AA486410_at	ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.
RC_AA026417_at	ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.
RC_AA125808_at	zl29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.
RC_AA243721_at	zr68f11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668589 3'.
RC_AA452131_at	zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'.
RC_N29345_at	yw85c10.s1 Homo sapiens cDNA clone 259026 3'.
RC_Z39191_at	H. sapiens partial cDNA sequence; clone c-13c12.
RC_AA156187_at	zo47c04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 590022 3' similar to contains Alu repetitive element;.
RC_AA157340_at	zo42h04.s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 589591 3'.
RC_AA343514_at	EST49299 Gall bladder I Homo sapiens cDNA 3' end.
RC_AA482224_f_at	ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.
RC_AA053021_at	zl72f02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510171 3'.
RC_AA279420_at	zs85d09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2
RC_AA477252_at	zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'.
RC_N31597_s_at	yy20b11.s1 Homo sapiens cDNA clone 271773 3'.
U31875_at	Human Hep27 protein mRNA, complete cds.
RC_F04611_at	H. sapiens partial cDNA sequence; clone c-zse11.
AA263032_s_at	PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.
AA447052_at	zw86b06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783827 5' similar to TR:G595950 G595950 PROTEIN N-TERMINAL ASPARAGINE AMIDOHYDROLA-

	SE.
RC_AA056247_at	zf62c02.s1 Soares retina N2b4HR Homo sapiens cDNA clone 381506 3' similar to contains Alu repetitive element;.
RC_AA156532_at	zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.
RC_AA456039_at	aa03d01.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812161 3'.
RC_AA461444_at	zx68b01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796585 3'.
RC_AA033974_at	zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.
RC_AA034365_at	zf02b10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375739 3' similar to gb:J05096_rna1 SODIUM/POTASSIUM-TRANSPORTING ATPASE ALPHA-1 CHAIN (HUMAN);contains Alu repetitive element;.
RC_N22115_s_at	yw32a09.s1 Homo sapiens cDNA clone 253912 3'.
RC_W04698_at	zb94b05.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320433 3'.
AA126592_at	zl17g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.
AA428172_f_at	zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.
C01790_at	HUMGS0003746, Human Gene Signature, 3'-directed cDNA sequence.
RC_AA017146_at	ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.
RC_AA236037_at	zs05g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.
RC_AA026270_at	ze97f07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366949 3'.
RC_AA233837_at	zr47f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666563 3'.
RC_H60595_s_at	yr41h02.s1 Homo sapiens cDNA clone 207891 3'.
RC_N66388_at	yz39f01.s1 Homo sapiens cDNA clone 285433 3'.
RC_N91023_at	zb41a09.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 306136 3'.
RC_W80354_at	zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.
RC_T51995_at	yb29e09.s1 Homo sapiens cDNA clone 72616 3'.
RC_AA463637_at	zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'.
RC_AA161085_at	zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;.
RC_AA489101_at	aa56h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.
RC_AA255464_at	zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.
RC_AA609614_at	af15f12.s1 Soares testis NHT Homo sapiens cDNA clone 1031759 3'.
L32832_s_at	Homo sapiens zinc finger homeodomain protein (ATBF1-A)

	mRNA, complete cds.
AA464051_s_at	zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'.
RC_Z39652_at	H. sapiens partial cDNA sequence; clone c-1fg03.
AB002321_at	Human mRNA for KIAA0323 gene, partial cds.
RC_D59981_s_at	Human fetal brain cDNA 3'-end GEN-079C04.
RC_AA027954_at	zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'.
RC_AA115559_at	zl07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'.
L02547_at	Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds
RC_AA256996_at	zr81h11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682149 3'.
RC_AA450373_at	zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.
RC_N71875_at	yz34f07.s1 Homo sapiens cDNA clone 284965 3'.
AA431505_at	zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'.
U77942_at	Human syntaxin 7 mRNA, complete cds.
RC_AA393876_s_at	zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'.
W16686_at	zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'.
RC_AA287388_at	zs50f04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.
RC_F02397_s_at	H. sapiens partial cDNA sequence; clone c-0xh11.
AA247679_at	hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.
RC_AA282791_at	zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'.
AA504744_at	aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'.
RC_AA149987_at	zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'.
RC_AA262485_at	zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.
AA436536_at	zv08g07.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 753084 5'.
RC_AA037828_at	zf03g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.
RC_AA255628_at	zs31g06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.
AA418098_at	zv94b04.r1 Soares NhHMPu S1 Homo sapiens cDNA clone 767407 5'.
RC_N21380_at	yx54c04.s1 Homo sapiens cDNA clone 265542 3'.
AA459542_s_at	zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G.
RC_AA464180_at	zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULO-

	SA CELL 13.0 KD PROTEIN HGR74 (HUMAN);.
RC_AA143726_at	zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to TR:G530823 G530823 EPI- DERMAL GROWTH FACTOR RECEPTOR KINASE SUB- STRATE. ;.
RC_N38930_at	yy43e04.s1 Homo sapiens cDNA clone 274014 3'.
H27242_at	yl63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVA- TOR ;.
RC_AA002088_at	zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapi- ens cDNA clone 428116 3'.
D31313_s_at	Human fetal-lung cDNA 5'-end sequence.
RC_R40702_at	yf73f10.s1 Homo sapiens cDNA clone 27969 3'.
RC_AA405543_at	zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.
RC_AA284143_at	zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'.
RC_AA158234_at	zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.
R66920_at	yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element;.
RC_AA034189_at	zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.
AA147510_s_at	zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'.
RC_N48715_at	yy75h02.s1 Homo sapiens cDNA clone 279411 3'.
AA489299_at	ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'.
RC_AA242799_at	zr65f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANS- CRIPTIONAL REGULATOR SPO8. [1] ;.
AA091412_s_at	ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapi- ens cDNA 5'.
RC_H70554_at	yr91a03.s1 Homo sapiens cDNA clone 212620 3'.
RC_AA256208_at	zr80a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 681974 3'.
RC_R64660_at	yi22a10.s1 Homo sapiens cDNA clone 139962 3'.
RC_AA135185_at	zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.
AA442428_at	zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to SW:YB72_YEAST P38137 HYPOTHETICAL 60.5 KD.PROTEIN IN PDB1-ABD1 IN- TERGENIC REGION. ;.
RC_AA293719_at	zt55h03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726293 3'.
RC_AA287131_at	zt20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+- ISOCITRATE DEHYDROGENASE ;.
AB002387_at	Human mRNA for KIAA0389 gene, complete cds.
RC_N50550_at	yy89f05.s1 Homo sapiens cDNA clone 280737 3'.

wherein the notation refers to Accession No. in the database UniGene (Build 18).

91. The method according to claim 89 or 01, wherein at least one gene is introduced into the tumor cell.

92. The method according to claim 89 or 90, wherein at least two different genes are introduced into the tumor cell.

93. A method for reducing cell tumorigenicity or malignancy of a cell, said method comprising

obtaining at least one nucleotide probe capable of hybridising with at least one gene of a tumor cell, said at least one gene being selected from genes being expressed in an amount at least one-fold lower in normal cells than the amount expressed in said tumor cell, and

introducing said at least one nucleotide probe into the tumor cell in a manner allowing the probe to hybridise to the at least one gene, thereby inhibiting expression of said at least one gene.

94. The method according to claim 93, wherein the nucleotide probe is selected from probes capable of hybridising to a nucleotide sequence comprising a sequence as identified below

AA402119_at	zu55d04,r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA, ;,
RC_AA102581_at	zn42d02,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550083 3',
RC_H14089_at	ym62c07,s1 Homo sapiens cDNA clone 163500 3',
RC_R46079_f_at	yg49c02,s1 Homo sapiens cDNA clone 36133 3',
RC_R67918_at	yi25g01,s1 Homo sapiens cDNA clone 140304 3',
RC_W15360_at	zc17d10,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR:S39983 S39983 eps8 protein - mouse ;,
AA082171_at	zn42g07,r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5',
AA425593_at	zw48f02,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5',



F15201_at	H, sapiens partial cDNA sequence,
H15219_at	ym30f02,r1 Homo sapiens cDNA clone 49693 5',
R60368_at	yh04b02,r1 Homo sapiens cDNA clone 42052 5',
R86859_at	ym86a02,r1 Homo sapiens cDNA clone 165770 5',
RC_AA045342_at	zk59g01,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3',
RC_AA171985_at	zo98g05,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3',
T63174_s_at	yc04e08,r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element,,
U90268_at	Human Krit1 mRNA, complete cds,
X14787_at	Human mRNA for thrombospondin
RC_AA196991_s_at	zq10a10,s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, ,,
RC_F02470_at	H, sapiens partial cDNA sequence; clone c-10c01,
RC_F08899_at	H, sapiens partial cDNA sequence; clone c-2uc10,
RC_H15259_at	ym30c10,s1 Homo sapiens cDNA clone 49795 3',
RC_H52133_at	yo44d04,s1 Homo sapiens cDNA clone 180775 3',
RC_R17059_at	yf45a10,s2 Homo sapiens cDNA clone 129786 3',
RC_R45292_at	yg46b01,s1 Homo sapiens cDNA clone 35626 3',

or a sequence as identified below .

C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,
D80002_at	Human mRNA for KIAA0180 gene, partial cds
RC_AA149586_at	zl39e03,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3',
RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',
RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',
RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',
RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element,,
RC_R46206_at	yj53d08,s1 Homo sapiens cDNA clone 152463 3',
RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38554 3',
AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',
AB002346_at	Human mRNA for KIAA0348 gene, complete cds,
D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,
M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds
N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',
RC_AA149044_at	zl45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',
RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',
RC_AA281743_r_at	zl06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',
RC_AA406338_at	zv10f06,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',

RC_AA424524_at	zv90g02,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',
RC_AA435840_at	zt80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',
RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',
RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 - Homo sapiens cDNA clone 547660 3',
RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',
RC_AA148923_at	zl27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',
RC_H98653_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',
RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',
RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',
RC_T90374_at	yd43e03,s1 Homo sapiens cDNA clone 111004 3' similar to SP:POL2_MOUSE P11369 RETROVIRUS-RELATED POLYPROTEIN ;,
RC_Z38182_at	H, sapiens partial cDNA sequence; clone c-02a08,

or a sequence as identified below

RC_AA054726_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',
RC_AA206042_at	zq77f02,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;,
RC_R98735_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',
AA115572_s_at	zl05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN, ;,
AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',
AA489287_at	ab36e04,r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5',
D82226_s_at	similar to TAT-binding protein-2,
H49499_s_at	yq20g10,r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 274386 5',
M11844_at	Human prealbumin gene, complete cds,
RC_AA026388_at	ze92c03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',
RC_AA044601_at	zk55d05,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',
RC_AA182030_at	zp57a03,s1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 624268 3',
RC_AA233451_at	zr30b02,s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',
RC_AA236493_at	zr75c10,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',
RC_AA401098_f_at	zu50g01,s1 Soares ovary tumor NbHOT Homo sapiens cDNA

	clone 741456 3' similar to contains Alu repetitive element; contains element THR repetitive element ;,
RC_AA441818_at	zw62f01,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',
RC_AA478109_at	zt89d04,s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',
RC_AA481430_at	zv06g11,s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',
RC_AA488878_at	aa55f02,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',
RC_AA599032_at	ae41h03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',
S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],
U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds
U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds
RC_AA063574_at	ze25f03,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to gb:X52104 P68 PROTEIN (HUMAN);,
RC_AA132524_at	zo20c04,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to contains Alu repetitive element;,
RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,
RC_H12863_at	yj14b12,s1 Homo sapiens cDNA clone 148703 3',
RC_N33927_s_at	yv25e09,s1 Homo sapiens cDNA clone 243784 3',
RC_R08189_at	yf18f03,s1 Homo sapiens cDNA clone 127229 3',
RC_R39191_s_at	yc89c12,s1 Homo sapiens cDNA clone 23345 3',
RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',
RC_T90746_at	yd41f10,s1 Homo sapiens cDNA clone 110827 3',
RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,

or a sequence as identified below

AA011479_at	zi01b10,r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5',
AA314779_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,
RC_AA084640_at	zn20d05,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',
RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);,
RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',
RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',
RC_AA491465_at	ab04a05,s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3',
RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone

	897509 3',
RC_AA598689_at	ae49a08,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950198 3',
W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,
RC_AA004887_at	zh90g01,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428592 3',
RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',
RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTER-CELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);,
RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',
RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',
RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',
RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',
RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',
RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',
RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',
AA150364_at	zl07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',
AA174185_at	PTH207 HTC1L1 Homo sapiens cDNA 5'/3',
AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',
AB002316_at	Human mRNA for KIAA0318 gene, partial cds,
H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',
M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds
R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',
RC_AA004274_at	zh97f02,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429243 3' similar to contains element MER22 repetitive element ;,
RC_AA004415_at	zh89b04,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428431 3',
RC_AA007160_at	13cDNA30A-3,seq Soares infant brain 1NIB Homo sapiens cDNA clone HY18-3 3',
RC_AA053660_at	zi74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to contains Alu repetitive element;,
RC_AA252603_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',
RC_AA411944_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',
RC_AA412700_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',
RC_AA430032_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',
RC_AA430368_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',
RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens

	cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;,
RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3',
RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3',
RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3',
RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,
T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);,
W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 ;,
RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3',
RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, ;,
RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element; ,
RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3',
RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3',
RC_AA151245_at	zl40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3',
RC_AA164252_f_at	zq46f06,s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 632771 3',
RC_AA167006_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3',
RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3',
RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,
RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,
RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3',
RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3',
RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3',
RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-Ft266 3',
RC_W37382_at	zc12c07,s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322092 3',
RC_W60582_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN); ,
RC_W84768_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ; ,

wherein the notation refers to Accession No. in the database UniGene (Build 18).

- 5 95. The method according to claim 93 or 94, wherein at least one gene is introduced into the tumor cell.
96. The method according to claim 93 or 94, wherein at least two different genes are introduced into the tumor cell.
- 10 97. A method for producing antibodies against an expression product of a cell from a biological tissue, said method comprising the steps of
- obtaining expression product(s) from at least one gene said gene being expressed as defined in any of claims 36-45,
- 15 immunising a mammal with said expression product(s) obtaining antibodies against the expression product.
- 20 98. A pharmaceutical composition for the treatment of a biological condition comprising at least one antibody produced as described in claim 97.
99. A vaccine for the prophylaxis or treatment of a biological condition comprising at least one expression product from at least one gene said gene being expressed as defined in any of claims 36-45.
- 25 100. Use of a method as defined in any of claims 1-85 for producing an assay for diagnosing a biological condition in animal tissue.
- 30 101. Use of a peptide as defined in any of claims 86-88 for preparation of a pharmaceutical composition for the treatment of a biological condition in animal tissue.
- 35 102. Use of a gene as defined in any of claims 89-91 for preparation of a pharmaceutical composition for the treatment of a biological condition in animal tissue.

103. Use of a probe as defined in any of claims 89-95 for preparation of a pharmaceutical composition for the treatment of a biological condition in animal tissue.

5

104. An assay for determining the presence or absence of a biological condition in animal tissue, comprising

10

at least one first marker capable of detecting a first expression level of at least one gene from a first gene group, wherein the gene from the first gene group is selected from genes expressed in normal tissue cells in an amount higher than expression in biological condition cells, and/or

15

at least one second marker capable of detecting a second expression level of at least one gene from a second gene group, wherein the second gene group is selected from genes expressed in normal tissue cells in an amount lower than expression in biological condition cells.

20

105. The assay according to claim 104, wherein the marker is a nucleotide probe.

106. The assay according to claim 104, wherein the marker is an antibody.

25

107. The assay according to claim 104, wherein the genes are as defined in any of claims 11-18, 43-45, and 47-50.

30

108. An assay for determining an expression pattern of a bladder cell, comprising at least a first marker and/or a second marker, wherein the first marker is capable of detecting a gene from a first gene group as defined in claim 50, and/or the second marker is capable of detecting a gene from a second gene group as defined in claim 50.

35

109. The assay according to claim 108, wherein the first marker is capable of detecting one gene as identified in Table 18, and the second marker is capable of detecting another gene as identified in Table 18.

110. The assay according to claim 109, comprising at least one marker for each gene group,

5 correlating the first expression level and/or the second expression level to a standard level of the assessed genes to determine the presence or absence of a biological condition in the animal tissue.

111. The assay according to claim 110, wherein the marker is a nucleotide probe.

10 112. The assay according to claim 110, wherein the marker is an antibody.

113. A method for identifying a tissue sample as being from bladder, comprising  
15 subjecting the tissue to a method as identified in any of claims 50-83, determining expression patterns and comparing the expression patterns determined with expression patterns from bladder tissue.



Fig. 1.1

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 23 LOST PAAAA and Decreased

Gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	Fold Change TaglIP(vs)N
yx16a10.r1 Homo sapiens cDNA clone 251930 5'.	N24990_s_at	83 P	51 A	D			-1,6
yf41e08.r1 Homo sapiens cDNA clone 129446 5' similar to SP:A46661 A46661 LEUKOTRIENE B4.	R11267_at	521 P	167 A	D			-3,3
OMEGA-HYDROXYLASE, P-450L TB OMEGA-CYTOCHROME P-450 SUPERFAMILY MEMBER -;							
yz76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:102982 GLYCOPHORIN B PRECURSOR (HUMAN);.	RC_H52937_at	1007 P	38 A	D			-15,2
yz89e02.s1 Homo sapiens cDNA clone 212474 3'.	RC_H65547_at	1865 P	522 A	D			-3,6
yu73c12.s1 Homo sapiens cDNA clone 239446 3'.	RC_H70047_at	209 P	-7 A	D			-5,6
yx99c11.s1 Homo sapiens cDNA clone 269876 3'.	RC_N24879_at	352 P	1 A	MD			-6,4
yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	RC_N68312_at	334 P	97 A	D			-7,7
yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	RC_R22189_at	254 P	29 A	D			-7,6
yg44f05.s1 Homo sapiens cDNA clone 35270 3'.	RC_R45582_at	169 P	-83 A	D			-6,2
yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	RC_R63457_at	813 P	68 A	D			-12
yi49g10.s1 Homo sapiens cDNA clone 142626 3'.	RC_R70903_at	224 P	107 A	D			-2,1
zi88c01.s1 Stralagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	RC_AA054321_s_at	808 P	94 A	D			-18,7
zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	RC_AA099820_at	277 P	14 A	D			-5,5
zi17g05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 3'.	RC_AA127238_at	104 P	39 A	D			-7,8
zo64h02.s1 Stralagene pancreas (#937208) Homo sapiens cDNA clone 591699 3'.	RC_AA147224_at	216 P	13 A	D			-5,2
zq12e02.s1 Stralagene muscle 937209 Homo sapiens cDNA clone 529498 3'.	RC_AA192765_at	83 P	0 A	D			-3,7
zi33d07.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 665197 3'.	RC_AA195718_at	241 P	25 A	D			-5,6
zi28b08.s1 Stralagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664695 3'.	RC_AA232114_s_at	217 P	58 A	MD			-3,7
similar to gb:L05779 SOLUBLE EPOXIDE HYDROLASE (HUMAN);							
zi07h12.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712487 3'.	RC_AA281770_at	81 P	25 A	D			-3,2
zw59e03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774364 3' similar to	RC_AA430209_at	96 P	2 A	D			-6,2
TR:G1199667 G1199667 PROTEIN KINASE C-BINDING PROTEIN ENIGMA 1;							
zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	RC_AA452410_at	380 P	100 A	D			-3,3

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Fig. 1.2

EST Bladderspecific and with sort score 0.5  
 2424 selected genes with sort score 0.5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score  $\geq 0.5$   
 23 LOST PAAAA and Decreased

Gene name	Sort Score TaglilP(vs)N	Avg Diff T1glilP	Abs Call T1glilP	Diff Call T1glilP(vs)N	B=A	Fold Change T1glilP(vs)N	Sort Score T1glilP(vs)N	Avg Diff T2glililmiXP	Abs Call T2glililmiXP	Diff Call T2glililmiXP(vs)N
yx16e10.r1 Homo sapiens cDNA clone 261930 5'.	-0.09	-22 A	D	D	B=A	~7.9	-1.97	-51 A	D	D
yx1e08.r1 Homo sapiens cDNA clone 129446 5' similar to SP:A46661 A46661 LEUKOTRIENE B4.	-1.58	263 A	D	D		-2.2	-0.71	189 A	D	D
OMEGA-HYDROXYLASE, P-450.LB OMEGA-CYTOCHROME P-450 SUPERFAMILY MEMBER -1;										
yt76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:J02982 GLYCOPHORIN B PRECURSOR (HUMAN);.	-10.7	106 A	D	D		-6.7	-5.22	134 A	D	D
yr89a02.s1 Homo sapiens cDNA clone 212474 3'.	-3.44	533 A	D	D		-3.5	-3.31	305 A	D	D
yu73c12.s1 Homo sapiens cDNA clone 239446 3'.	-2.14	21 A	D	D		~4.3	-1.41	14 A	D	D
yx99c11.s1 Homo sapiens cDNA clone 269876 3'.	-2.89	27 A	D	D		~7.9	-4.37	-51 A	D	D
yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	-4.23	-49 A	D	D		~10.2	-5.66	9 A	D	D
yz26a02.s1 Homo sapiens cDNA clone 130826 3'.	-4.14	8 A	D	D		~8.1	-4.39	34 A	D	D
yg44d05.s1 Homo sapiens cDNA clone 35270 3'.	-2.07	86 A	D	D		-6.5	-4.43	-22 A	D	D
yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	-9.55	-72 A	D	D		~19.5	-13.74	-68 A	D	D
yz49g10.s1 Homo sapiens cDNA clone 142626 3'.	-0.36	104 A	D	D		-2.1	-0.39	79 A	D	D
zi68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	-13.25	66 A	D	D		-12.2	-9.67	-112 A	D	D
zk87c05.s1 Soares pregnant uterus NbhHPU Homo sapiens cDNA clone 489800 3'.	-3.07	-22 A	D	D		~7.2	-3.44	61 A	D	D
zi17g05.s1 Soares pregnant uterus NbhHPU Homo sapiens cDNA clone 502292 3'.	-2.69	4 A	D	D		~8.1	-2.81	30 A	D	D
zo64h02.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591699 3'.	-2.05	43 A	D	D		~4.9	-1.91	19 A	D	D
zq12e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629498 3'.	-0.83	-45 A	D	D		~4.5	-1.08	14 A	D	D
zr33d07.s1 Soares NbhIMPu S1 Homo sapiens cDNA clone 665197 3'.	-2.42	32 A	D	D		~5.8	-2.58	117 A	D	D
zr28b08.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664695 3'.	-0.97	-70 A	D	D		~7.9	-3.26	-2 A	D	D
similar to gb:L05778 SOLUBLE EPOXIDE HYDROLASE (HUMAN);										
zi07h12.s1 NC1 CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712487 3'.	-0.58	11 A	D	D		~4.9	-1.11	28 A	D	D
zw59e03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774364 3' similar to	-1.61	16 A	D	D		~5.0	-1.28	-20 A	D	D
TR:G1199667 G1199667 PROTEIN KINASE C-BINDING PROTEIN ENIGMA 1;										
zxc31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	-1.26	78 A	D	D		-4.2	-1.92	77 A	D	D

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Fig. 1.3

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 23 LOST PAAAA and Decreased

Gene name	B=A	Fold Change T2gllmixP(vs)N	Sort Score T2gllmixP(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	B=A	Fold Change T2gllmixP(vs)N	Sort Score T2gllmixP(vs)N
YX16e10.r1 Homo sapiens cDNA clone 261930 5'		-6,4	-1,37	-65 A	D			-3,1	-1,49
Y141e08.r1 Homo sapiens cDNA clone 129446 5' similar to SP-A46661 A46661 LEUKOTRIENE B4 OMEGA-HYDROXYLASE, P-450LTB OMEGA-CYTOCHROME P-450 SUPERFAMILY MEMBER -;		-5,3	-3,93	99 A	D			-7,3	-5,67
Y176e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb:02982 GLYCOPHORIN B PRECURSOR (HUMAN);		-6,1	-7,55	421 A	D			-4,4	-4,88
Y189e02.s1 Homo sapiens cDNA clone 212474 3'		-4,2	-1,43	-28 A	D			-4,4	-1,44
Y173c12.s1 Homo sapiens cDNA clone 239446 3'		-5,9	-2,48	-6 A	D			-6,2	-3,29
Y189c11.s1 Homo sapiens cDNA clone 269876 3'		-7,3	-3,99	-54 A	D			-5,5	-2,13
Y138a06.s1 Homo sapiens cDNA clone 285298 3'		-6,1	-3,21	-140 A	D			-7,9	-4,21
Y126a02.s1 Homo sapiens cDNA clone 130826 3'		-10,6	-7,27	-207 A	D			-6,3	-1,84
Y144f05.s1 Homo sapiens cDNA clone 35270 3'		-15,5	-11,69	78 A	D			-10,4	-8,56
Y183e10.s1 Homo sapiens cDNA clone 39835 3'		-2,8	-0,76	13 A	D			-3,7	-1,11
Y149g10.s1 Homo sapiens cDNA clone 142626 3'		-19,3	-14,36	-343 A	D			-17,5	-13,53
Z188c01.s1 Striatagene colon (#937204) Homo sapiens cDNA clone 509760 3'		-5,1	-2,44	-41 A	D			-6,0	-2,91
Z187c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'		-5,3	-1,69	-83 A	D			-6,4	-1,92
Z117g05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 3'		-4,2	-1,48	32 A	D			-3,6	-1,13
Z064h02.s1 Striatagene pancreas (#937208) Homo sapiens cDNA clone 591699 3'		-2,8	-0,47	-57 A	D			-3,6	-0,65
Z12e02.s1 Striatagene muscle 937209 Homo sapiens cDNA clone 629498 3'		-2,2	-0,41	30 A	D			-4,3	-1,56
Z133d07.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 665197 3'		-5,3	-1,96	42 A	D			-4,2	-1,4
Z178b08.s1 Striatagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 604695 3' similar to gb:L05779 SOLUBLE EPOXIDE HYDROLASE (HUMAN);		-3,3	-0,57	16 A	D			-2,8	-0,38
Z107h12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712467 3'		-4,4	-0,89	33 A	D			-2,3	-0,28
Z159e03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774364 3' similar to TR:G1199667 G1199667 PROTEIN KINASE C-BINDING PROTEIN ENIGMA 1;		-4,3	-1,98	126 A	D			-3	-1,12
Z131f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786093 3'									

Fig. 1.4

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 23 LOST PAAAA and Decreased

Gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N
aa39g12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815686.3;	RC_AA485115_at	488 P	319 A	17 A	MD	-1,5		
zk85e12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489646 5'.	AA099391_s_at	106 P	17 A	2 A	D	-6,1		
zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CATHEPSIN ;	AA131127_at	284 P	2 A	2 A	D	~18,4		
zp02c06.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595210 5' similar to SW:QRI2_YEAST	AA173505_at	150 P	125 A	MD		-1,6		
P43124 HYPOTHETICAL 46.1 KD PROTEIN IN PHO2-POL3 INTERGENIC REGION. [1].								
zk39b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724693 5'.	AA291786_s_at	28 P	-83 A	D	D	~7,8		
zu53f10.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741739 5'.	AA402971_s_at	293 P	85 A	D	D	-3,4		

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Fig. 1.5

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to-tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 23 LOST PAAAA and Decreased

Gene name	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A	Fold Change T1glIP(vs)N	Sort Score T1glIP(vs)N	Avg Diff T2glIPmixP	Abs Call T2glIPmixP	Diff Call T2glIPmixP(vs)N
aa39g12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815688 3'.	-0,18	14/A	D	D		~19,6	-9,23	192/A	D	D
zk85e12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489646 5'.	-1,77	10/A	D	D		~5,8	-1,63	4/A	D	D
zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CATHEPSIN ;	-7,64	27/A	D	D		-10,1	-4,9	16/A	D	D
zp02c06.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595210 5' similar to SW:QR12_YEAST	-0,12	72/A	D	D		-2,7	-0,63	-1/A	D	D
P43124 HYPOTHETICAL 46.1 KD PROTEIN IN PHO2-POL3 INTERGENIC REGION. [1] ;										
zk39b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724693 5'.	-0,78	-105/A	D	D		~7,5	-0,66	-126/A	D	D
zk53f10.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741739 5'.	-1,27	50/A	D	D		-5,9	-2,82	71/A	D	D

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Fig. 1.6

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1088 bladderspecific ESTs with sort score >= 0,5  
 23 LOST PAAAA and Decreased

Gene name	B=A	Fold Change T2gllm1xP(vs)N	Sort Score T2gllm1xP(vs)N	Avg Diff T2gllm1xP	Abs Call T2gllm1xP	Diff Call T2gllm1xP(vs)N	B=A	Fold Change T2gllm1xP(vs)N	Sort Score T2gllm1xP(vs)N
aa39g12.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815686 3'		-2,5	-0,88	110 A	D			-3,5	-1,55
zk85e12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489646 5'		~4,4	-1,07	29 A	D			~2,9	-0,52
zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to SW:CATX_BOVIN P05689 CATHEPSIN ;		~9,9	-4,84	-83 A	D			~10,6	-5,5
zp02c06.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 595210 5' similar to SW:QR12_YEAST		~7,5	-3,03	-41 A	D			~6,7	-2,62
P43124 HYPOTHETICAL 46.1 KD PROTEIN IN PHO2-POL3 INTERGENIC REGION. [1] ;									
z139b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724693 5'		~7,0	-0,53	-157 A	D			~5,6	-0,71
zu53f10.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741739 5'		-4,1	-1,74	118 A	D			-2,5	-0,64

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Fig. 2.1

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 7 LOST PPAAA and Decreased (NC excluded)

Gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B-A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A
yw37b04.r1 Homo sapiens cDNA clone 254383 5'.	N75611_s_at	230 P	25 P	25 P	25 P	D	D	-7,1	-2,74	8 A	8 A	D	D
yn64a06.s1 Homo sapiens cDNA clone 173170 3'.	RC_H20769_at	1411 P	742 P	742 P	742 P	D	D	-1,9	-0,68	535 A	535 A	D	D
y98706.s1 Homo sapiens cDNA clone 40364 3'.	RC_R54822_at	212 P	44 P	44 P	44 P	D	D	-4,5	-1,68	26 A	26 A	D	D
z167e01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509688 3' similar to TR:G189087 G189087 NONSPECIFIC CROSSREACTING ANTIGEN. ;	RC_AA058357_s_at	389 P	224 P	224 P	224 P	D	D	-2,2	-0,65	58 A	58 A	D	D
zn53a05.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561872 3' similar to contains Alu repetitive element.	RC_AA086487_at	181 P	52 P	52 P	52 P	D	D	-4,3	-1,6	-3 A	-3 A	D	D
aa13e06.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 813154 3'.	RC_AA456289_at	610 P	219 P	219 P	219 P	D	D	-2,8	-1,21	112 A	112 A	D	D
af14g11.s1 Soares testis NHT Homo sapiens cDNA clone 1031684 3'.	RC_AA609539_at	48 P	24 P	24 P	24 P	D	D	-2,5	-0,27	-8 A	-8 A	D	D

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Fig. 2.2

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 7 LOST PPAAA and Decreased (NC excluded)

Gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N
Yw37b04.r1 Homo sapiens cDNA clone 254383 5'	~10,9	-4,5	22 A	D	D		~7,2	-3,01	46 A	D	D		-4,5	-1,67
Yn64a06.s1 Homo sapiens cDNA clone 173170 3'	-2,6	-1,63	572 A	D	D		-2,5	-1,4	545 A	D	D		-2,6	-1,56
Yg87f06.s1 Homo sapiens cDNA clone 40364 3'	~6,1	-2,41	-19 A	D	D		~4,8	-1,72	58 A	D	D		~4,5	-1,6
Zl67e01.s1 Striatagene colon (#937204) Homo sapiens cDNA clone 509668 3' similar to TR:G189087 G189087 NONSPECIFIC CROSSREACTING ANTIGEN. ;	~11,7	-7,49	-13 A	D	D		~10,1	-6,69	10 A	D	D		~8,4	-5,59
Zn53a05.s1 Striatagene muscle 937209 Homo sapiens cDNA clone 561672 3' similar to contains Alu repetitive element.	~5,7	-2,39	-8 A	D	D		~4,8	-1,79	62 A	D	D		~3,3	-1,02
aa13e06.s1 Soares Nht-IMPu S1 Homo sapiens cDNA clone 813154 3'.	-6,2	-4,66	140 A	D	D		-4,9	-3,49	413 A	D	D		-1,7	-0,31
af14g11.s1 Soares testis NHTT Homo sapiens cDNA clone 1031684 3'.	~3,8	-0,5	10 A	D	D		~2,3	-0,17	-26 A	D	D		~2,9	-0,23



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Fig. 3.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of datasets incl AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with absolut value of sort score >= 0,5 changing from N to tumor in at least 1 comparison  
 1068 bladderspecific ESTs, not present in normal colon mucosa  
 11 genes lost PPPAA and decreased in all

gene name	Probe Set EST subA & B	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs) N	B=A
Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.	AF000546_at	59 P	7 P	7 P	D	D	
Homo sapiens epoxide hydrolase (EPHX) gene, complete cds	L25880_s_at	624 P	207 P	207 P	D	D	
yx28d06.s1 Homo sapiens cDNA clone 263051 3'.	RC_N20047_at	391 P	137 P	137 P	D	D	
zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.	RC_W51910_at	690 P	379 P	379 P	D	D	
zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.	RC_W85375_s_at	2209 P	375 P	375 P	D	D	
H. sapiens partial cDNA sequence; clone c-05e04.	RC_Z38289_at	1217 P	423 P	423 P	D	D	
H. sapiens partial cDNA sequence; clone c-0qb04.	RC_Z38807_s_at	201 P	103 P	103 P	D	D	
zv04a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 756394 3'.	RC_AA393793_at	126 P	71 P	71 P	D	D	
zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.	RC_AA446570_at	131 P	50 P	50 P	D	D	
aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.	RC_AA456016_at	99 P	29 P	29 P	D	D	
zv17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ;	RC_AA479350_at	258 P	84 P	84 P	MD	MD	

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Fig. 3.2

EST Bladder candidates of 17742 ESTs  
 Exclusion of datasets incl AFFX, all NC, all A, 3NC + M\*  
 2424 genes with absolute value of sort score >= 0.5 changing from N to tumor in at least 1 comparison  
 1068 bladderspecific ESTs, not present in normal colon mucosa  
 11 genes lost PPPAA and decreased in all

gene name	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change T1gllIP(vs)N	Sort Score T1gllIP(vs)N	Avg Diff T2gllIPmixP	Abs Call T2gllIPmixP	Diff Call T2gllIPmixP(vs)N
Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.	-4.2	-0.77	-8 P	MD			-4.3	-0.74	-35 A	D	D
Homo sapiens epoxide hydrolase (EPHX) gene, complete cds	-3	-1.47	218 P	D			-2.9	-1.32	178 A	D	D
Y28406.s1 Homo sapiens cDNA clone 263051 3'.	-2.8	-1.01	120 P	D			-3.3	-1.33	35 A	D	D
Y28406.s1 Homo sapiens cDNA clone 263051 3'.	-2.4	-0.89	331 P	D			-2.8	-1.29	375 A	D	D
z37706.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.	-7.5	-10.36	563 P	D			-5	-6.3	86 A	D	D
z155a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.	-2.5	-1.26	227 P	D			-4.7	-3.96	145 A	D	D
H. sapiens partial cDNA sequence; clone c-05e04.	-1.9	-0.28	97 P	MD			-2.1	-0.34	45 A	D	D
H. sapiens partial cDNA sequence; clone c-0qb04.	-1.8	-0.16	49 P	D			-2.6	-0.46	58 A	D	D
z164a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 756394 3'.	-2.6	-0.5	68 P	D			-2	-0.24	44 A	D	D
zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 763656 3'.	-3.5	-0.75	22 P	D			-4.6	-1.18	30 A	D	D
aa03a08.s1 Soares NhrIMPu S1 Homo sapiens cDNA clone 612150 3'.	-2.7	-0.68	69 P	MD			-3.3	-1.02	20 A	D	D
z17d09.s1 Soares NhrIMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ::											

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Fig. 3.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of datasets incl AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with absolute value of sort score  $\geq 0.5$  changing from N to tumor in at least 1 comparison  
 1068 bladderspecific ESTs, not present in normal colon mucosa  
 11 genes lost PPPAA and decreased in all

Gene name	B=A	Fold Change T2glllmixP(vs)N	Sort Score T2glllmixP(vs)N	Avg Diff T2glllsolidP	Abs Call T2glllsolidP	Diff Call T2glllsolidP(vs)N	B=A	Fold Change T2glllsolidP(vs)N	Sort Score T2glllsolidP(vs)N	Abs Calls
Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.		~4.1	-0.58	3 A	D			~3.2	-0.54	PPPAA
Homo sapiens epoxide hydrolase (EPHX) gene, complete cds		~3.5	-1.96	318 A	D			~2	-0.52	PPPAA
yz28d06.s1 Homo sapiens cDNA clone 263051 3'.		~6.9	-3.93	207 A	D			~1.6	-0.19	PPPAA
zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324315 3'.		~2.4	-0.88	268 A	D			~3.5	-2	PPPAA
zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.		~26.9	-22.82	186 A	D			~13.9	-17.47	PPPAA
H. sapiens partial cDNA sequence; clone c-05e04.		~7.3	-6.96	-170 A	D			~18.6	-15.52	PPPAA
H. sapiens partial cDNA sequence; clone c-0qb04.		~3.6	-1.09	84 A	D			~2.4	-0.49	PPPAA
zv64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758394 3'.		~2.2	-0.3	26 A	D			~3.3	-0.73	PPPAA
zw64c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.		~3	-0.65	43 A	D			~2.9	-0.59	PPPAA
aa03a08.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 812150 3'.		~3.3	-0.67	40 A	D			~2.4	-0.36	PPPAA
zv17d09.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ::		~9.1	-4.29	42 A	D			~7.2	-3.59	PPPAA

Fig. 4.1

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 14 LOST PPPPA, NC in TagII were excluded

Gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TagII P	Abs Call TagII P	Diff Call TagII P (vs) N	B=A	Fold Change TagII P (vs) N	Sort Score TagII P (vs) N	Avg Diff TagII P	Abs Call TagII P	Diff Call TagII P (vs) N	B=A	Fold Change TagII P (vs) N
yx76e10.s1 Homo sapiens cDNA clone 267882 3'.	RC_N23319_at	878 P	530 P	530 P	530 P	D		-1,7	-0,33	316 P	316 P	D		-2,4
y921a08.s1 Homo sapiens cDNA clone 32940 3'.	RC_R43812_at	297 P	317 P	317 P	317 P	D		-1,5	-0,14	-112 P	-112 P	MD		~9,5
zc13b12.s1 Soares parathyroid tumor NbHFA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.i3 LTR2 repetitive element .:	RC_W37778_f_at	1142 P	566 P	566 P	566 P	MD		-2	-0,74	1485 P	1485 P	NC		1,3
ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.	RC_AA001045_at	703 P	313 P	313 P	313 P	D		-2,2	-0,78	184 P	184 P	D		-3,3
z184c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'.	RC_AA086005_at	332 P	161 P	161 P	161 P	D		-1,9	-0,29	465 P	465 P	NC		1,6
zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.	RC_AA191524_at	484 P	252 P	252 P	252 P	MD		-1,9	-0,41	178 P	178 P	D		-2,7
z05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.	RC_AA219553_at	602 P	1052 P	1052 P	1052 P	I		1,7	0,45	1383 P	1383 P	I		2
zs27d03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.	RC_AA252765_at	273 P	166 P	166 P	166 P	D		-2	-0,35	254 P	254 P	NC		-1,3
z12b03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.	RC_AA293300_s_at	918 P	1828 P	1828 P	1828 P	I		2	0,91	1006 P	1006 P	NC		1,1
zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to TR:G780241 G780241 AU-BINDING PROTEINENOYL-COA HYDRATASE. .:	RC_AA05832_at	1154 P	492 P	492 P	492 P	D		-2,3	-1,12	545 P	545 P	D		-2,1
H.sapiens gene for cytochrome 20	X73501_at	51 P	219 P	219 P	219 P	I		3,7	1,18	505 P	505 P	I		9,3
zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'.	AA046768_at	655 P	384 P	384 P	384 P	D		-1,7	-0,32	506 P	506 P	NC		-1,3
EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.	AA314457_at	509 P	198 P	198 P	198 P	D		-2,6	-0,92	482 P	482 P	NC		-1,1
EST27743 Cerebellum II Homo sapiens cDNA 5' end.	AA324825_at	234 P	383 P	383 P	383 P	I		1,6	0,21	423 P	423 P	I		1,8

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Fig. 4.2

EST Bladderspecific and with sort score 0,5  
 2424 selected genes with sort score 0,5 changing from N to tumor  
 4013 genes from EST sub-A&B present in Normal bladder, not colon  
 1068 bladderspecific ESTs with sort score >= 0,5  
 14 LOST PPPPA, NC in TagII were excluded

Gene name	Sort Score T1glllP(vs)N	Avg Diff T2glllmlxP	Abs Call T2glllmlxP	Diff Call T2glllmlxP(vs)N	B=A	Fold Change T2glllmlxP(vs)N	Sort Score T2glllmlxP(vs)N	Avg Diff T2glllmlxP	Abs Call T2glllmlxP	Diff Call T2glllmlxP(vs)N	B=A	Fold Change T2glllmlxP(vs)N	Sort Score T2glllmlxP(vs)N
yx78e10.s1 Homo sapiens cDNA clone 267882 3'.	-0,95	275 P	D	D		-2,7	-1,3	203 A	D	D		-3,7	-2,27
yg21a08.s1 Homo sapiens cDNA clone 32940 3'.	-4,82	-71 P	D	D		-7,1	-3,44	176 A	D	D		-1,5	-0,13
zct13b12.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.13 LTR2 repetitive element .:	0,13	1432 P	I	D		2	0,87	-6 A	D	D		-14,2	-11,73
ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.	-1,75	157 P	D	D		-3,8	-2,15	84 A	D	D		-7,3	-5,32
z184c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'.	0,19	405 P	NC	NC		1,4	0,09	104 A	D	D		-2,9	-0,9
zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.	-1,02	168 P	D	D		-2,9	-1,15	94 A	D	D		-5,2	-3,08
z105e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.	0,76	826 P	NC	NC		-1,1	-0,01	508 A	D	D		-1,9	-0,48
zs27d03.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:666405 3'.	-0,05	198 P	NC	NC		-1,4	-0,08	50 A	D	D		-5,8	-2,44
z128d03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.	0,02	538 P	D	D		-1,7	-0,41	816 A	D	D		-1,4	-0,15
zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to TR-G780241 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. .:	-0,85	628 P	D	D		-1,8	-0,55	450 A	D	D		-2,6	-1,39
H.sapiens gene for cytochrome 20	5,91	991 P	I	I		18,6	13,95	14 A	D	D		-2,1	-0,13
zk72d02.r1 Soares pregnant uterus Nb-IPU Homo sapiens cDNA clone 488355 5'.	-0,08	632 P	NC	NC		1,3	0,08	122 A	D	D		-5,3	-3,64
EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.	-0,01	232 P	D	D		-2	-0,49	63 A	D	D		-8,1	-5,36
EST272743 Cerebellum II Homo sapiens cDNA 5' end.	0,32	232 P	NC	NC		1,3	0,05	50 A	D	D		-3,5	-1,04



Fig. 5.2

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets Incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 12 genes Abs calls PPPP and DECREASED more than 3 fold

gene name	Sort Score T'gillP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A
Human mRNA for IgG Fc binding protein, complete cds	-10,95	468 P	D	D	D	-5,5	-7,66	600 P	P	D	D
yv73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 246345 3'	-1,86	292 P	D	D	D	-4,2	-2,48	294 P	P	D	D
ya88f04.s1 Homo sapiens cDNA clone 68767 3'	-24,78	634 P	D	D	D	-8,6	-18,63	601 P	P	D	D
ye30d12.s1 Homo sapiens cDNA clone 119255 3'	-0,68	418 P	D	D	D	-2,8	-1,63	301 P	P	D	D
zr97c07.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'	-10,6	395 P	D	D	D	-3,9	-3,6	611 P	P	D	D
zr81e12.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 682126 3'	-9,68	526 P	D	D	D	-4,4	-5,34	312 P	P	D	D
zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to TR:E92665 E92665 AP56 ;	-1,66	346 P	D	D	D	-5,3	-6,32	765 P	P	D	D
zw46c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773088 3'	-0,31	399 P	D	D	D	-2,4	-0,95	223 P	P	D	D
zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'	-2,25	206 P	D	D	D	-3,9	-2,56	253 P	P	D	D
aa90h11.s1 Stralagene fetal retina 937202 Homo sapiens cDNA clone 838629 3' similar to contains Alu repetitive element;	-0,71	268 P	D	D	D	-1,7	-0,25	333 P	P	D	D
zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'	-7,78	310 P	D	D	D	-3,1	-1,86	121 P	P	D	D
zd27g09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341920 5'	-0,76	136 P	D	D	D	-1,9	-0,3	78 P	P	D	D

Fig. 5.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 12 genes Abs calls PPPPP and DECREASED more than 3 fold

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	Z	Y	X	W	V	U	T
Human mRNA for IgG Fc binding protein, complete cds	-4.3	-6.38	PPPPP	2636	422	345	468	600		
yy73b09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone 248345 3'	-5	-3.22	PPPPP	573	180	303	292	294		
ya88f04.s1 Homo sapiens cDNA clone 68767 3'	-9.1	-19.58	PPPPP	6706	431	456	634	601		
ye30d12.s1 Homo sapiens cDNA clone 119255 3'	-3.8	-3.03	PPPPP	1154	370	620	418	301		
zr97c07.s1 NC1_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:693628 3'	-2.5	-1.52	PPPPP	1235	296	166	395	611		
zr81e12.s1 Soares Nhl-MP1 S1 Homo sapiens cDNA clone 682126 3'	-7.4	-10.4	PPPPP	2650	197	333	526	312		
zt19f03.s1 Soares ovary tumor Nhl-H19W Homo sapiens cDNA clone 713597 3' similar to	-2.4	-1.52	PPPPP	1847	625	736	346	765		
TR:E92665 E92665 AP56 :										
zw46c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773088 3'	-4.4	-3.17	PPPPP	813	98	574	399	223		
zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'	-3.1	-1.77	PPPPP	803	161	222	208	253		
aa90h11.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838629 3' similar to contains Alu repetitive element.	-1.5	-0.13	PPPPP	396	145	190	268	333		
zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'	-7.9	-7.15	PPPPP	1060	290	111	310	121		
zd27g09.r1 Soares fetal heart Nhl-H19W Homo sapiens cDNA clone 341920 5'	-2.8	-0.75	PPPPP	243	47	87	136	78		



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Fig. 6.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets Incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort:score >= +/- 0.5 changing from N to tumor  
 6 genes Abs calls PPPPP and INCREASED

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1gllIP	Abs Call T1gllIP	Diff Call T1gllIP(vs)N	B=A	Fold Change T1gllIP(vs)N	Sort Score T1gllIP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP
Human threonyl-tRNA synthetase mRNA, complete cds	M63180_at	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P
HFBEST-40 Human fetal brain QBoqin2 Homo sapiens cDNA.	N89553_s_at	1057 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P
Human fetal brain cDNA 3'-end GEN-045C11.	RC_D80198_at	658 P	753 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P
H. sapiens partial cDNA sequence; clone c-0Kf11.	RC_F01986_f_at	753 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P
yn51g07.s1 Homo sapiens cDNA clone 171996 3'.	RC_H18997_at	557 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P	2036 P	2031 P	1376 P	1139 P	188 P	275 P
zn76c11.s1 Stragene NT2 neuronal precursor 937230 Homo sapiens cDNA	RC_AA101562_at	-25 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P	576 P
clone 564116 3' similar to contains Alu repetitive element.																	

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Fig. 6.2

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 6 genes Abs calls PPPPP and INCREASED

gene name	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Abs Calls	Z	A	B	C	D
Human threonyl-tRNA synthetase mRNA, complete cds	I		2.3	0.88	394	P	I		2.1	0.48	PPPPP	188	275	392	439	394
Human fetal brain QBOq1n2 Homo sapiens cDNA.	I		2.7	2.46	3134	P	I		2.8	2.61	PPPPP	1057	2036	3957	3061	3134
Human fetal brain cDNA 3'-end GEN-045C11.	I		2.4	1.31	2503	P	I		3.4	3.44	PPPPP	688	2031	1660	1646	2503
H. sapiens partial cDNA sequence; clone c-0kf11.	I		2.1	0.94	1580	P	I		2.1	0.97	PPPPP	753	1376	1438	1567	1580
yn51g07.s1 Homo sapiens cDNA clone 171996 3'.	I		1.9	0.55	1197	P	I		2.1	0.9	PPPPP	557	1139	1102	1039	1197
zn76c11.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA	I		~8.3	4.51	529	P	I		~8.9	6.05	PPPPP	-25	576	435	349	529
clone 564116 3' similar to contains Alu repetitive element.	I															

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Fig. 7.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX; all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A
Z076b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'	RC_AA158234_at	3924 P	1796 P	2243 P	2243 P	NC	NC	-2,2	-1,71	5083 P	NC	NC	NC
Y061a11.s1 Homo sapiens cDNA clone 182396 3'	RC_H42123_at	2240 P	2243 P	2243 P	2243 P	NC	NC	1,1	0,03	3225 P	NC	NC	NC
H. sapiens partial cDNA sequence: clone c-1302	RC_Z39200_at	1943 P	550 P	550 P	550 P	D	D	-3,5	-3,44	499 P	MD	MD	MD
YX63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'	RC_N21687_at	1806 P	665 P	665 P	665 P	D	D	-2,5	-1,48	511 P	D	D	D
Homo sapiens mRNA for uroplakin II	Y13645_at	1633 P	1476 P	1476 P	1476 P	NC	NC	-1,1	-0,03	1335 P	NC	NC	NC
ZB86b03.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310445 3'	RC_N98461_at	1539 P	2135 P	2135 P	2135 P	NC	NC	1,2	0,06	917 P	D	D	D
Z499d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 357619 3'	RC_W92449_at	1535 P	980 P	980 P	980 P	NC	NC	-1,6	-0,35	933 P	MD	MD	MD
H. sapiens partial cDNA sequence: clone c-13c12	RC_Z39191_at	1426 P	719 P	719 P	719 P	NC	NC	-1,6	-0,29	888 P	NC	NC	NC
Z129e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'	RC_AA125808_at	1404 P	1253 P	1253 P	1253 P	NC	NC	-1,1	-0,03	1985 P	NC	NC	NC
Y11a06.s1 Homo sapiens cDNA clone 61138 3'	RC_T40767_at	1341 P	921 P	921 P	921 P	NC	NC	-1,1	-0,03	312 P	D	D	D
Y29c05.s1 Homo sapiens cDNA clone 72584 3'	RC_T51972_at	1340 P	1120 P	1120 P	1120 P	NC	NC	-1,2	-0,05	2625 P	I	I	I
ZS58b06.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701651 3'	RC_AA286862_at	1278 P	1104 P	1104 P	1104 P	NC	NC	-1,2	-0,05	963 P	NC	NC	NC
Yw91b09.s1 Homo sapiens cDNA clone 259577 3'	RC_N28764_at	1276 P	1261 P	1261 P	1261 P	NC	NC	-1	0	963 P	NC	NC	NC
ZW32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'	AA428172_f_at	1267 P	1916 P	1916 P	1916 P	NC	NC	1,5	0,34	1463 P	NC	NC	NC
Y135d05.s1 Homo sapiens cDNA clone 150729 3'	RC_H02265_at	1247 P	1199 P	1199 P	1199 P	NC	NC	-1	-0,01	854 P	NC	NC	NC
ZB98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'	RC_W44745_at	1247 P	1120 P	1120 P	1120 P	NC	NC	-1,4	-0,18	1256 P	NC	NC	NC
Yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element	RC_R91819_at	1215 P	1537 P	1537 P	1537 P	NC	NC	1,3	0,11	1180 P	NC	NC	NC
ZX84d05.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810441 5'	AA464468_at	1214 P	975 P	975 P	975 P	NC	NC	-1,2	-0,09	646 P	D	D	D
Zp78e01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626328 3' similar to TR:G998813 G998813 TIF1, [1].	RC_AA188647_at	1202 P	994 P	994 P	994 P	NC	NC	-1,2	-0,07	1100 P	NC	NC	NC
Zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742146 3' similar to T R:G780241 G780241 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. ;	RC_AA405832_at	1154 P	492 P	492 P	492 P	D	D	-2,3	-1,12	545 P	D	D	D

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Fig. 7.2

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPA and DECREASED  
 8 genes LOST Abs calls PPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1gllP(vs)N	Sort Score T1gllP(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	B=A	Fold Change T2gllmixP(vs)N	Sort Score T2gllmixP(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	B=A
zo76b01.s1 Striatogene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.	1,3	0,24	2974 P	NC	NC		-1,3	-0,24	-510 A	A	D	
yo61a11.s1 Homo sapiens cDNA clone 182396 3'.	1,6	0,56	1762 P	NC	NC		1,1	0,04	2012 A	A	D	
h1. sapiens partial cDNA sequence; clone c-1302.	-3,9	-4,06	701 P	MD	MD		-2,6	-1,77	-148 A	A	D	
yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	-3,2	-2,61	485 P	D	D		-3,4	-2,88	315 A	A	D	
Homo sapiens mRNA for uroplakin II.	-1,1	-0,03	5941 P	I	I		3,6	6,33	78 A	A	D	
zb66b03.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310445 3'.	-1,9	-0,77	1250 P	D	D		-1,4	-0,23	384 A	A	D	
zd99d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 357619 3'.	-1,6	-0,43	1111 P	NC	NC		-1,4	-0,19	769 A	A	D	
h1. sapiens partial cDNA sequence; clone c-13c12.	-1,3	-0,09	828 P	NC	NC		-1,3	-0,14	303 A	A	D	
zi29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.	1,4	0,25	1680 P	NC	NC		1,1	0,04	315 A	A	D	
ya11a06.s1 Homo sapiens cDNA clone 61138 3'.	-4,3	-3,95	227 P	D	D		-5,9	-6,12	-645 A	A	D	
yb29c05.s1 Homo sapiens cDNA clone 72584 3'.	1,9	0,93	813 P	D	D		-1,8	-0,59	960 A	A	D	
zs58b05.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701651 3'.	-1,3	-0,14	1016 P	NC	NC		-1,3	-0,1	581 A	A	D	
yw91b09.s1 Homo sapiens cDNA clone 259577 3'.	-1,3	-0,14	494 P	NC	NC		-2,6	-1,48	228 A	A	D	
zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.	1,2	0,05	983 P	NC	NC		-1,3	-0,11	435 A	A	D	
yj35d05.s1 Homo sapiens cDNA clone 150729 3'.	-1,5	-0,23	682 P	D	D		-1,8	-0,57	130 A	A	D	
zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.	1	0	2132 P	NC	NC		1,7	0,59	289 A	A	D	
yp99c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element ;.	-1	0	980 P	NC	NC		-1,3	-0,1	281 A	A	D	
zx84d05.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810441 5'.	-1,9	-0,61	338 P	D	D		-4,7	-4,29	434 A	A	D	
zp78e01.s1 Striatogene HeLa cell s3 937216 Homo sapiens cDNA clone 626328 3' similar to	-1,1	-0,02	839 P	NC	NC		-1,4	-0,21	636 A	A	D	
TR:G998813 G998813 TIF1. [1] ;.												
zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to T	-2,1	-0,85	628 P	D	D		-1,8	-0,55	450 A	A	D	
R:G780241 G780241 AU-BINDING PROTEINENOYL-COA HYDRATASE. ;.												

Fig. 7.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	Z	S	B	C	D
zo76b01.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592777 3'.	~65.2	-52.03	PPPPA	3924	1796	5083	2974	0
yo61a11.s1 Homo sapiens cDNA clone 182396 3'.	-1.1	-0.04	PPPPA	2240	2243	3225	1762	0
H. sapiens partial cDNA sequence; clone c-13f02.	~29.1	-25.33	PPPPA	1943	550	499	701	0
yo63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	-5.2	-5.7	PPPPA	1806	665	511	485	0
Homo sapiens mRNA for uraplekin II.	-20.2	-18.83	PPPPA	1633	1476	1335	5941	0
zb66b03.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 310445 3'.	-4.7	-4.76	PPPPA	1539	2136	917	1250	0
zd99d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 357619 3'.	-2	-0.83	PPPPA	1535	980	933	1111	0
H. sapiens partial cDNA sequence; clone c-13c12.	-3.7	-2.8	PPPPA	1426	719	888	828	0
zi29e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503374 3'.	-3.7	-2.88	PPPPA	1404	1253	1985	1580	0
ya11a06.s1 Homo sapiens cDNA clone 61138 3'.	~24.3	-20.64	PPPPA	1341	921	312	227	0
yb29c05.s1 Homo sapiens cDNA clone 72584 3'.	-1.4	-0.19	PPPPA	1340	1120	2625	813	0
zs58b06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701651 3'.	-2.2	-1	PPPPA	1278	1104	963	1016	0
yw91b09.s1 Homo sapiens cDNA clone Z59577 3'.	-5.6	-5.58	PPPPA	1276	1261	963	494	0
zw32b06.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770963 5'.	-3	-2.09	PPPPA	1267	1916	1463	983	0
yj35d05.s1 Homo sapiens cDNA clone 150729 3'.	-6	-4.82	PPPPA	1247	1199	854	682	0
zb98a11.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 320828 3'.	-8.9	-8.37	PPPPA	1247	1120	1256	2132	0
yp98c05.s1 Homo sapiens cDNA clone 195560 3' similar to contains MER1 repetitive element.;	-4.3	-3.79	PPPPA	1215	1537	1180	960	0
zx84d05.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810441 5'.	-3.8	-3.09	PPPPA	1214	975	646	338	0
zp78e01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626328 3' similar to	-1.9	-0.62	PPPPA	1202	994	1100	839	0
TR:G998813 G998813 TIF1. [1].;								
zu57g11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 742148 3' similar to T	-2.6	-1.39	PPPPA	1154	492	545	628	0
R:G780241 G780241 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE.;								

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Fig. 7.4

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	MD	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1gllIP	Abs Call T1gllIP	Diff Call T1gllIP(vs)N	B=A
z1c13b12.s1 Soares parathyroid tumor NblHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.13 LTR2 repetitive element ;	RC_W37778_f_at	1142 P	566 P	1485 P	NC	-2	-0.74	1485 P	NC	NC	NC	NC	NC
Homo sapiens breast cancer-specific protein 1 (BCSG1) mRNA, complete cds.	AF010126_at	1098 P	774 P	852 P	NC	-1.4	-0.19	852 P	NC	NC	NC	NC	NC
yx83a05.r1 Homo sapiens cDNA clone 268304 5'.	N36432_at	1069 P	627 P	786 P	D	-2	-0.7	786 P	NC	NC	NC	NC	NC
zr74c04.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 669126 3' similar to gb:S69002	RC_AA236533_s_at	1064 P	1530 P	883 P	NC	1.2	0.07	883 P	NC	NC	NC	NC	NC
ECOTROPIC VIRUS INTEGRATION 1 SITE PROTEIN (HUMAN);													
z1s5e05.s1 Soares ovary tumor NblHOT Homo sapiens cDNA clone 726272 3'.	RC_AA293163_at	972 P	1180 P	756 P	NC	1.2	0.07	756 P	NC	NC	NC	NC	NC
zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.	RC_AA196790_at	949 P	733 P	873 P	NC	-1.3	-0.1	873 P	NC	NC	NC	NC	NC
zr53g12.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 667174 3'.	RC_AA253220_at	940 P	964 P	637 P	NC	1	0	637 P	NC	NC	NC	NC	NC
zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 592490 3'.	RC_AA100437_at	919 P	717 P	673 P	NC	-1.3	-0.09	673 P	NC	NC	NC	NC	NC
z128d03.s1 Soares ovary tumor NblHOT Homo sapiens cDNA clone 714437 3'.	RC_AA293300_s_at	918 P	1828 P	1006 P	I	2	0.91	1006 P	NC	NC	NC	NC	NC
H. sapiens partial cDNA sequence; clone c-1fg03.	RC_Z39852_at	911 P	1175 P	385 P	NC	1.4	0.2	385 P	NC	NC	NC	NC	NC
Human glutathione transferase M2 (GSTM2) mRNA, complete cds	M83509_s_at	886 P	1365 P	2970 P	NC	1.7	0.49	2970 P	NC	NC	NC	NC	NC
H. sapiens partial cDNA sequence; clone c-1ke11.	RC_Z39842_at	882 P	556 P	662 P	NC	-1.6	-0.28	662 P	NC	NC	NC	NC	NC
yx78e10.s1 Homo sapiens cDNA clone 267882 3'.	RC_N23319_at	878 P	530 P	316 P	D	-1.7	-0.33	316 P	D	D	D	D	D
zs78d11.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703605 3'.	RC_AA278817_at	835 P	687 P	307 P	NC	-1.2	-0.06	307 P	D	D	D	D	D
Homo sapiens mRNA in the region near the blk gene involved in a-gamma-globulinemia	L20773_at	822 P	913 P	700 P	NC	1.1	0.02	700 P	D	D	D	D	D
yk44h05.s1 Soares placenta Nbl2HP Homo sapiens cDNA clone 142137 3'.	RC_F69276_at	820 P	831 P	767 P	NC	1	0	767 P	NC	NC	NC	NC	NC
H. sapiens partial cDNA sequence; clone c-15d02.	RC_F02841_at	775 P	488 P	550 P	NC	-1.6	-0.27	550 P	NC	NC	NC	NC	NC
zw03a04.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 768174 3' similar to contains Alu repetitive element;	RC_AA424791_at	775 P	410 P	504 P	D	-1.9	-0.5	504 P	D	D	D	D	D
yk63b06.s1 Homo sapiens cDNA clone 26725 3'.	RC_F39869_at	759 P	136 P	356 P	NC	-4.1	-2.41	356 P	NC	NC	NC	NC	NC

Fig. 7.5

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets Incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A
zci13b12.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.13 LTR2 repetitive element ;	1.3	0.13	1432 P	D			2	0.87	-6 A	D		
Homo sapiens breast cancer-specific protein 1 (BCSG1) mRNA, complete cds.	1.1	0.01	284 P	D			-2.8	-1.4	32 A	D		
yx83a05.r1 Homo sapiens cDNA clone 268304 5'.	-1.4	-0.15	704 P	NC			-1.3	-0.08	-238 A	D		
zr74c04.s1 Soares NihMPu S1 Homo sapiens cDNA clone 669126 3' similar to gb:S69002	-1.4	-0.19	745 P	D			-1.7	-0.43	112 A	D		
ECOTROPIC VIRUS INTEGRATION 1 SITE PROTEIN (HUMAN);												
z255e05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726272 3'.	-1.3	-0.1	116 P	D			-3.3	-2.26	-49 A	D		
zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.	-1.1	-0.02	774 P	NC			-1.1	-0.01	175 A	D		
z53g12.s1 Soares NihMPu S1 Homo sapiens cDNA clone 667174 3'.	-1.5	-0.21	169 P	D			-5.5	-4.74	245 A	D		
zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.	-1.4	-0.14	707 P	NC			-1.3	-0.1	259 A	D		
z128d03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.	1.1	0.02	538 P	D			-1.7	-0.41	816 A	D		
H. sapiens partial cDNA sequence; clone c-1fg03.	-1.4	-0.15	268 P	NC			-3.4	-2.19	-739 A	D		
Human glutathione transferase M2 (GSTM2) mRNA, complete cds	3.4	3.86	5604 P	MI			6.3	13.61	551 A	D		
H. sapiens partial cDNA sequence; clone c-1ke11.	-1.6	-0.32	841 P	NC			-1	-0.01	502 A	D		
yx78e10.s1 Homo sapiens cDNA clone 267882 3'.	-2.4	-0.95	275 P	D			-2.7	-1.3	203 A	D		
zs78d11.s1 NC1_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703605 3'.	-2.7	-1.34	228 P	D			-4	-2.91	60 A	D		
Homo sapiens mRNA in the region near the bik gene involved in a-gamma-globulinemia	-1.2	-0.04	819 P	D			-1	0	367 A	D		
yi44h05.s1 Soares placenta Nb2HP Homo sapiens cDNA clone 142137 3'.	-1.1	-0.01	572 P	NC			-1.6	-0.34	300 A	D		
H. sapiens partial cDNA sequence; clone c-15d02.	-1.4	-0.15	349 P	D			-2.2	-0.79	193 A	D		
zw03a04.s1 Soares NihMPu S1 Homo sapiens cDNA clone 768174 3' similar to contains Alu repetitive element;	-1.5	-0.23	571 P	NC			-1.4	-0.13	203 A	D		
yf63b06.s1 Homo sapiens cDNA clone 26725 3'.	-2.1	-0.7	502 P	NC			-1.8	-0.43	159 A	D		

Fig. 7.6

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	2	4	8	16	32
zc13b12.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322175 3' similar to contains LTR2.13 LTR2 repetitive element ;:	~-14,2	-11,73	PPPPA	1142	566	1485	1432	0
Homo sapiens breast cancer-specific protein 1 (BCSG1) mRNA, complete cds:	~-19,6	-13,18	PPPPA	1098	774	852	284	0
yx83a05.r1 Homo sapiens cDNA clone 268304 5'.	~-28,5	-18,48	PPPPA	1069	627	786	704	0
zr74c04.s1 Soares NhlMPu S1 Homo sapiens cDNA clone 669126 3' similar to gb:S69002 ECOTROPIC VIRUS INTEGRATION 1 SITE PROTEIN (HUMAN);:	-8,3	-7,49	PPPPA	1064	1530	883	745	0
zl55e05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726272 3'.	-5,1	-4,51	PPPPA	972	1180	756	116	0
zq60b06.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645971 3'.	-4,7	-3,5	PPPPA	949	733	873	774	0
zr53g12.s1 Soares NhlMPu S1 Homo sapiens cDNA clone 667174 3'.	-4,3	-3,47	PPPPA	940	984	637	169	0
zn59e02.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 562490 3'.	-4,9	-4,14	PPPPA	919	717	673	707	0
zi28d03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 714437 3'.	-1,4	-0,15	PPPPA	918	1828	1006	538	0
H. sapiens partial cDNA sequence; clone c-1fg03.	~-24,6	-18,85	PPPPA	911	1175	385	268	0
Human glutathione transferase M2 (GSTM2) mRNA, complete cds	-2,2	-1,04	PPPPA	886	1365	2970	5604	0
H. sapiens partial cDNA sequence; clone c-1ke11.	-2,1	-0,81	PPPPA	882	556	662	841	0
yx78e10.s1 Homo sapiens cDNA clone 267882 3'.	-3,7	-2,27	PPPPA	878	530	316	275	0
zs78d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703605 3'.	-13,3	-10,27	PPPPA	835	687	307	228	0
Homo sapiens mRNA in the region near the bik gene involved in a-gamma-globulinemia	-2,1	-0,69	PPPPA	822	913	700	819	0
yi44h05.s1 Soares placenta Nb2HP Homo sapiens cDNA clone 142137 3'.	-2,6	-1,16	PPPPA	820	831	767	572	0
H. sapiens partial cDNA sequence; clone c-15d02.	-5,1	-3,87	PPPPA	775	488	550	349	0
zw03a04.s1 Soares NhlMPu S1 Homo sapiens cDNA clone 768174 3' similar to contains Alu repetitive element;:	-3,8	-2,49	PPPPA	775	410	504	571	0
yf63b06.s1 Homo sapiens cDNA clone 26725 3'.	-4,8	-3,45	PPPPA	759	136	356	502	0



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Fig. 7.7

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs N)	B=A	Fold Change TaglIP (vs N)	Sort Score TaglIP (vs N)	Avg Diff T4glIP	Abs Call T4glIP	Diff Call T4glIP (vs N)	B=A
ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.	RC_AA482224_f_at	723 P	677 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
ze76f02.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364923 3' similar to contains Alu repetitive element; contains element LTR4 repetitive element ;.	RC_AA025277_at	720 P	677 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.	AA482319_f_at	712 P	676 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.	RC_AA001045_at	703 P	676 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
zo10f03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 567293 3' similar to SW:NI2M_BOVIN Q02369 NADH-UBIQUINONE OXIDOREDUCTASE B22 SUBUNIT ;.	RC_AA130545_s_at	674 P	708 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
z137c02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724514 3'.	RC_AA291659_at	655 P	482 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'.	AA046768_at	655 P	384 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
y181e01.r1 Homo sapiens cDNA clone 44466 5'.	H07011_at	654 P	635 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
z154g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);.	RC_AA293533_i_at	630 P	454 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
zn63g10.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 562914 3' similar to SW:LCFA_ECOLI P29212 LONG-CHAIN-FATTY-ACID-COA LIGASE ;.	RC_AA100549_at	629 P	319 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.	RC_AA071746_at	628 P	265 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
zp40g07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 611984 3'.	RC_AA180054_at	626 P	362 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.	AA263032_s_at	625 P	798 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
zd46i07.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343717 5'.	W69310_at	607 P	641 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
zr05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.	RC_AA219653_at	602 P	1052 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
aa91c07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838668 3'.	RC_AA457235_at	599 P	1617 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A
aa16h10.s1 Soares NhrHMPu S1 Homo sapiens cDNA clone 813475 3'.	RC_AA455967_at	591 P	369 P	1531 P	1204 P	-0.01	-1.1	-0.01	0.99	301 P	D	NC	B=A

Fig. 7.8

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1gllip(vs)N	Sort Score T1gllip(vs)N	Avg Diff T2gllimixP	Abs Call T2gllimixP	B=A	Fold Change T2gllimixP(vs)N	Sort Score T2gllimixP(vs)N	Avg Diff T2gllisolidP	Abs Call T2gllisolidP	B=A	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N
ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'.	1.4	0.21	567 P	NC	B=A	-1.3	-0.08	212 A	D	B=A	-1.3	-0.08
ze76f02.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364923 3' similar to contains Alu repetitive element:contains element LTR4 repetitive element ;.	-2.6	-1.15	463 P	NC		-1.6	-0.24	324 A	D			
ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'.	1.6	0.3	643 P	NC		-1.3	-0.1	96 A	D			
ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'.	-3.3	-1.75	157 P	D		-3.8	-2.15	84 A	D			
zo10f03.s1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone 567293 3' similar to SW:NI2M_BOVIN Q02369 NADH-UBIQUINONE OXIDOREDUCTASE B22 SUBUNIT ;.	1.8	0.55	1128 P	NC		1.4	0.2	1275 A	D			
zi37c02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724514 3'.	-2.4	-0.92	364 P	D		-2.1	-0.67	89 A	D			
zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'.	-1.3	-0.08	832 P	NC		1.3	0.08	122 A	D			
yi81e01.r1 Homo sapiens cDNA clone 44466 5'.	-1.2	-0.05	258 P	D		-2.9	-1.41	275 A	D			
zi54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);.	-1.6	-0.28	329 P	D		-1.9	-0.47	117 A	D			
zn63g10.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 562914 3' similar to SW:LCFA_ECOLI P29212 LONG-CHAIN-FATTY-ACID--COA LIGASE ;.	1.4	0.14	386 P	MD		-1.5	-0.15	41 A	D			
ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;.	-1.7	-0.31	388 P	NC		-1.4	-0.1	175 A	D			
zp40g07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 611964 3'.	-1.8	-0.35	429 P	NC		-1.5	-0.21	253 A	D			
PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.	-1.5	-0.21	479 P	NC		-1.3	-0.09	230 A	D			
zd46f07.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343717 5'.	1.5	0.24	467 P	NC		-1.3	-0.08	250 A	D			
zo05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'.	2	0.76	826 P	NC		-1.1	-0.01	508 A	D			
aa91c07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838668 3'.	1.6	0.3	779 P	NC		1.1	0.03	229 A	D			
aa16h10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 813475 3'.	-1.3	-0.08	249 P	D		-2	-0.46	158 A	D			

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Fig. 7.9

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

236 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp

data sorted acc. To Avg.Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	Z	W	U	D
ab15c03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 3'	-3.4	-1.96	PPPPA	723	677	1204	567
ze76f02.s1 Soares fetal heart NBH19W Homo sapiens cDNA clone 364923 3' similar to contains Alu repetitive element contains element LTR4 repetitive element ;	-2.2	-0.77	PPPPA	720	1531	301	463
ab15c03.r1 Stratagene lung (#937210) Homo sapiens cDNA clone 840868 5'	-7.4	-5.76	PPPPA	712	676	1112	543
ze47b04.s1 Soares retina N2b4HR Homo sapiens cDNA clone 362095 3'	-7.3	-5.32	PPPPA	703	313	184	157
zo10f03.s1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone 567293 3' similar to SW-N12M BOVIN Q02369 NADH-UBIQUINONE OXIDOREDUCTASE B22 SUBUNIT ;	1.4	0.17	PPPPA	674	708	1539	1129
zi37c02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724514 3'	-8.6	-6.92	PPPPA	655	482	324	364
zk72d02.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488355 5'	-5.3	-3.64	PPPPA	655	384	506	832
yf61e01.r1 Homo sapiens cDNA clone 44466 5'	-2.7	-1.23	PPPPA	654	635	612	258
zi54g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb.J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);	-5.4	-3.71	PPPPA	630	454	382	329
zn63g10.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 562914 3' similar to SW:LCFA_ECOLI P29212 LONG-CHAIN-FATTY-ACID-COA LIGASE ;	-7.9	-5.25	PPPPA	629	319	971	386
ze41a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361524 3' similar to contains element PTR7 repetitive element ;	-3	-1.31	PPPPA	628	265	301	388
zp40g07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 611964 3'	-2.6	-1.06	PPPPA	626	362	374	429
PMY0335 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'	-3.1	-1.64	PPPPA	625	798	408	479
zd46f07.r1 Soares fetal heart NBH19W Homo sapiens cDNA clone 343717 5'	-2.1	-0.59	PPPPA	607	641	924	467
zr05e02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 650618 3'	-1.9	-0.48	PPPPA	602	1052	1383	826
aa91c07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 838668 3'	-3	-1.52	PPPPA	599	1617	956	779
ea16h10.s1 Soares NhrIMPu S1 Homo sapiens cDNA clone 813475 3'	-3.7	-2.09	PPPPA	591	369	454	249

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Fig. 7.10

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs) N	Fold Change TaglIP (vs) N	Sort Score TaglIP (vs) N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP (vs) N	B=A
yx51a09.r1 Homo sapiens cDNA clone 265240 5'.	N27670_at	585 P	446 P	446 P	446 P	NC	-1.3	-0.09	620 P	620 P	NC	B=A
za66e02.s1 Homo sapiens cDNA clone 297434 3'.	RC_N80152_at	575 P	330 P	330 P	330 P	NC	-1.7	-0.33	353 P	353 P	NC	
yz22a10.s1 Homo sapiens cDNA clone 139962 3'.	RC_R64660_at	574 P	370 P	370 P	370 P	NC	-1.6	-0.21	380 P	380 P	NC	
z044g03.s1 Stratiagene pancreas (#937208) Homo sapiens cDNA clone 591700 3'.	RC_AA147218_s_at	573 P	483 P	483 P	483 P	NC	-1.2	-0.04	323 P	323 P	NC	
HUMGS0007818, Human Gene Signature, 3'-directed cDNA sequence.	C01139_at	572 P	807 P	807 P	807 P	NC	1.4	0.16	460 P	460 P	NC	
PM170691 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.	AA285284_at	564 P	525 P	525 P	525 P	NC	-1.2	-0.06	226 P	226 P	D	
zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.	RC_AA451685_at	562 P	471 P	471 P	471 P	NC	-1.5	-0.21	589 P	589 P	NC	
zx56e01.r1 Soares fetal liver spleen 1NfLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;	AA203222_at	559 P	429 P	429 P	429 P	NC	-1.3	-0.08	597 P	597 P	NC	
z152g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW-ADG_MOUSE P22892 GAMMA-ADAPTIN ;	RC_AA394071_at	554 P	353 P	353 P	353 P	NC	-1.6	-0.21	144 P	144 P	NC	
zv17e07.s1 Soares NihHMPu S1 Homo sapiens cDNA clone 753924 3'.	RC_AA479096_at	548 P	375 P	375 P	375 P	NC	-1.5	-0.16	378 P	378 P	NC	
zo34b05.s1 Stratiagene colon (#937204) Homo sapiens cDNA clone 588753 3'.	RC_AA156532_at	540 P	435 P	435 P	435 P	NC	1	0	486 P	486 P	NC	
H. sapiens partial cDNA sequence; clone c-1wg05.	RC_Z40233_at	516 P	971 P	971 P	971 P	NC	1.9	0.55	1036 P	1036 P	NC	
seq2490 Homo sapiens cDNA clone 3HFLSK20-87 3'.	RC_T03927_at	511 P	311 P	311 P	311 P	NC	-1.6	-0.25	216 P	216 P	D	
EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.	AA314457_at	509 P	198 P	198 P	198 P	D	-2.6	-0.92	482 P	482 P	NC	
yy69f05.s1 Homo sapiens cDNA clone 280737 3'.	RC_N50550_at	492 P	378 P	378 P	378 P	NC	-1.3	-0.08	165 P	165 P	NC	
zp88f04.s1 Stratiagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.	RC_AA191524_at	484 P	252 P	252 P	252 P	MD	-1.9	-0.41	178 P	178 P	D	
yy90b12.s1 Homo sapiens cDNA clone 259487 3'.	RC_N29740_at	482 P	514 P	514 P	514 P	NC	1.1	0.01	603 P	603 P	NC	
yy75h02.s1 Homo sapiens cDNA clone 279411 3'.	RC_N48715_at	481 P	345 P	345 P	345 P	NC	-1.4	-0.11	318 P	318 P	NC	
zx98h04.s1 Soares NihHMPu S1 Homo sapiens cDNA clone 811831 3'.	RC_AA463637_at	478 P	259 P	259 P	259 P	NC	-1.8	-0.36	349 P	349 P	NC	
zv38a06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772306 3'.	RC_AA40487_at	476 P	70 P	70 P	70 P	D	-6.8	-4.29	96 P	96 P	D	

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Fig. 7.11

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets Incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1gllp(vs)N	Sort Score T1gllp(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	B=A	Fold Change T2gllmixP(vs)N	Sort Score T2gllmixP(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	B=A
yx51a09.r1 Homo sapiens cDNA clone 265240 5'	1.1	0.01	727 P	NC			1.2	0.07	211 A	D		
z665e02.s1 Homo sapiens cDNA clone 297434 3'	-1.6	-0.25	213 P	D			-3.4	-1.7	133 A	D		
yi22a10.s1 Homo sapiens cDNA clone 139862 3'	-1.5	-0.19	324 P	NC			-1.8	-0.34	61 A	D		
z664g03.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591700 3'	-1.8	-0.35	319 P	D			-1.8	-0.36	88 A	D		
HUMGS0007818, Human Gene Signature, 3'-directed cDNA sequence.	-1.2	-0.06	678 P	NC			1.2	0.04	376 A	D		
PMY0691 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'	-1.9	-0.37	37 P	D			-15.2	-9.46	-12 A	D		
zx44c03.s1 Soares fetal fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'	-1.2	-0.05	512 P	NC			-1.4	-0.14	44 A	D		
zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;	1.1	0.01	420 P	NC			-1.3	-0.1	89 A	D		
zt52g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;	-3.9	-2.13	276 P	NC			-2.2	-0.73	132 A	D		
zv17e07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753924 3'	-1.5	-0.15	478 P	NC			-1.1	-0.03	254 A	D		
zo34b05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588753 3'	-1.2	-0.04	661 P	NC			1.3	0.11	195 A	D		
H. sapiens partial cDNA sequence; clone c-1wq05.	2	0.69	880 P	NC			1.2	0.08	177 A	D		
seq2490 Homo sapiens cDNA clone 3HFLSK20-87 3'	-2.2	-0.65	359 P	NC			-1.4	-0.1	121 A	D		
EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.	-1.1	-0.01	252 P	D			-2	-0.49	63 A	D		
yy89f05.s1 Homo sapiens cDNA clone 280737 3'	-3	-1.25	508 P	NC			1	0	-129 A	D		
zp88f04.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'	-2.7	-1.02	168 P	D			-2.9	-1.15	94 A	D		
yw90b12.s1 Homo sapiens cDNA clone 259487 3'	1.3	0.06	385 P	NC			-1	0	154 A	D		
yy75h02.s1 Homo sapiens cDNA clone 279411 3'	-1.3	-0.07	264 P	NC			-1.8	-0.35	49 A	D		
zx98h04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 811831 3'	-1.4	-0.1	329 P	NC			-1.5	-0.14	38 A	D		
zw38a06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772306 3'	-4.9	-2.88	401 P	NC			-1.2	-0.04	-74 A	D		

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Fig. 7.12

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

236 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp

data sorted acc. To Avg Diff N

gene name	Fold Change TzgilisolidP(vs)N	Sort Score TzgilisolidP(vs)N	Abs Calls	Z	Δ	Q	Q
yx51a09.r1 Homo sapiens cDNA clone 265240 5'.	-2.5	-0.85 PPPPA	585	446	620	727	0
z865e02.s1 Homo sapiens cDNA clone 297434 3'.	~8.4	-5.92 PPPPA	575	330	353	213	0
y122a10.s1 Homo sapiens cDNA clone 139962 3'.	~8.3	-5.86 PPPPA	574	370	380	324	0
z064g03.s1 Siratagene pancreas (#937208) Homo sapiens cDNA clone 591700 3'.	-6.5	-4.47 PPPPA	573	483	323	319	0
HJMG50007818, Human Gene Signature, 3'-directed cDNA sequence.	-2	-0.56 PPPPA	572	807	460	678	0
PMY0691 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5'.	~11.1	-5.19 PPPPA	564	525	226	37	0
zx44c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789316 3'.	-15.9	-10.91 PPPPA	562	471	589	512	0
zx56e01.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446520 5' similar to contains element MER17 repetitive element ;	-4.9	-2.67 PPPPA	559	429	597	420	0
z152g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726000 3' similar to SW:ADG_MOUSE P22892 GAMMA-ADAPTIN ;	-4.7	-3.11 PPPPA	554	353	144	276	0
zv17e07.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 753924 3'.	-2.2	-0.62 PPPPA	548	375	378	478	0
zo34b05.s1 Siratagene colon (#937204) Homo sapiens cDNA clone 588753 3'.	-3.1	-1.5 PPPPA	540	435	486	661	0
H. sapiens partial cDNA sequence; clone c-1wg05.	-4	-2.53 PPPPA	516	971	1036	880	0
seq2490 Homo sapiens cDNA clone 3HFLSK20-87 3'.	-4	-2.12 PPPPA	511	311	216	359	0
EST186294 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end.	-8.1	-5.36 PPPPA	509	198	482	252	0
yy89f05.s1 Homo sapiens cDNA clone 280737 3'.	~9.9	-6.48 PPPPA	492	378	165	508	0
zp88f04.s1 Siratagene HeLa cell s3 937216 Homo sapiens cDNA clone 627295 3'.	-5.2	-3.08 PPPPA	484	252	178	168	0
yy90b12.s1 Homo sapiens cDNA clone 259467 3'.	-2.5	-0.75 PPPPA	482	514	603	385	0
yy75h02.s1 Homo sapiens cDNA clone 279411 3'.	~7.2	-4.59 PPPPA	481	345	318	264	0
zx98f04.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 811831 3'.	~10.7	-6.36 PPPPA	478	259	349	329	0
zw38a06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772306 3'.	~13.2	-7.73 PPPPA	476	70	96	401	0

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Fig. 7.13

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs) N	B=A	Fold Change TaglIP (vs) N	Sort Score TaglIP (vs) N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP (vs) N	B=A
ym26a10.s1 Homo sapiens cDNA clone 49155 3'	RC_H16666_at	468 P	329 P	329 P	329 P	NC	NC	-1,4	-0,13	288 P	NC	NC	NC
z124d11.s1 Soares NihMPu S1 Homo sapiens cDNA clone 754581 3'	RC_AA406197_at	468 P	346 P	346 P	346 P	NC	NC	-1,4	-0,11	206 P	D	D	D
y197b11.s1 Homo sapiens cDNA clone 46276 3'	RC_H09594_at	466 P	369 P	369 P	369 P	NC	NC	-1,3	-0,06	500 P	NC	NC	NC
z062h09.s1 Stralagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;	RC_AA161085_at	464 P	332 P	332 P	332 P	NC	NC	-1,4	-0,11	318 P	NC	NC	NC
z115d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'	RC_AA452131_at	451 P	312 P	312 P	312 P	NC	NC	-1,4	-0,1	322 P	NC	NC	NC
z154g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);	RC_AA293533_f_at	442 P	358 P	358 P	358 P	NC	NC	-1,2	-0,05	299 P	NC	NC	NC
z159a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'	RC_AA398197_at	442 P	362 P	362 P	362 P	NC	NC	-1,2	-0,05	127 P	D	D	D
z186d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'	AA464051_s_at	436 P	290 P	290 P	290 P	NC	NC	-1,5	-0,16	189 P	NC	NC	NC
y129e01.s1 Homo sapiens cDNA clone 72600 3'	RC_I51990_at	432 P	427 P	427 P	427 P	NC	NC	-1,3	-0,06	615 P	NC	NC	NC
z154a11.s1 Soares NihMPu S1 Homo sapiens cDNA clone 667196 3'	RC_AA236356_at	420 P	344 P	344 P	344 P	NC	NC	-1,2	-0,04	371 P	NC	NC	NC
z192a04.r1 Soares fetal heart NbH19W Homo sapiens cDNA clone 356910 5' similar to contains element LTR3 repetitive element ;	W92676_at	415 P	423 P	423 P	423 P	NC	NC	1	0	353 P	NC	NC	NC
y233d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element ;	RC_N63332_at	413 P	415 P	415 P	415 P	NC	NC	1,3	0,08	337 P	D	D	D
Human aorta cDNA 5'-end GEN-259H09.	C16281_s_at	406 P	261 P	261 P	261 P	D	D	-1,6	-0,18	318 P	NC	NC	NC
zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'	RC_AA477252_at	403 P	482 P	482 P	482 P	NC	NC	-1,6	-0,19	151 P	NC	NC	NC
yw20e07.r1 Homo sapiens cDNA clone 252804 5'	H88035_s_at	399 P	370 P	370 P	370 P	NC	NC	-1,1	-0,01	468 P	NC	NC	NC
Human mRNA for KIAA0389 gene, complete cds.	AB002387_at	392 P	365 P	365 P	365 P	NC	NC	-1,1	-0,01	409 P	NC	NC	NC
y145h12.s1 Homo sapiens cDNA clone 35838 3'	RC_R45698_at	392 P	279 P	279 P	279 P	NC	NC	-1,2	-0,03	204 P	D	D	D
z175g11.s1 Soares NihMPu S1 Homo sapiens cDNA clone 669284 3'	RC_AA236542_at	391 P	321 P	321 P	321 P	NC	NC	1,1	0,01	206 P	D	D	D
EST789388 Small intestine I Homo sapiens cDNA 5' end similar to monoamine oxidase A.	AA376875_at	378 P	204 P	204 P	204 P	NC	NC	-1,3	-0,07	197 P	D	D	D

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Fig. 7.14

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N
ym26a10.s1 Homo sapiens cDNA clone 49155 3'	-1.6	-0.23	134 P	D	D	-3.5	-1.64	109 A	D	D	-3.5	-1.64	109 A	D	D
zv24d11.s1 Soares NihMPu S1 Homo sapiens cDNA clone 754581 3'	-1.8	-0.28	220 P	NC	NC	-1.7	-0.22	2 A	D	D	-1.7	-0.22	2 A	D	D
zy197b11.s1 Homo sapiens cDNA clone 46276 3'	1.1	0.01	363 P	NC	NC	-1.3	-0.07	79 A	D	D	-1.3	-0.07	79 A	D	D
zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;	-1.5	-0.14	621 P	NC	NC	1.3	0.1	23 A	D	D	1.3	0.1	23 A	D	D
zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'	-1.3	-0.08	342 P	NC	NC	-1.1	-0.01	117 A	D	D	-1.1	-0.01	117 A	D	D
z154g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to	-1.5	-0.15	294 P	D	D	-1.5	-0.16	44 A	D	D	-1.5	-0.16	44 A	D	D
gb.J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);	-3.5	-1.59	65 P	D	D	-6.8	-4.13	29 A	D	D	-6.8	-4.13	29 A	D	D
z159a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'	-2.3	-0.66	-151 P	NC	NC	-6.3	-3.15	-615 A	D	D	-6.3	-3.15	-615 A	D	D
zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'	1.4	0.14	440 P	NC	NC	-1.3	-0.08	86 A	D	D	-1.3	-0.08	86 A	D	D
yb29e01.s1 Homo sapiens cDNA clone 72600 3'	-1.1	-0.02	508 P	NC	NC	1.1	0.01	113 A	D	D	1.1	0.01	113 A	D	D
zf54a11.s1 Soares NihMPu S1 Homo sapiens cDNA clone 667196 3'	1.1	0.01	374 P	NC	NC	1.1	0.02	75 A	D	D	1.1	0.02	75 A	D	D
zd92a04.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 356910 5' similar to contains element LIR3 repetitive element ;	-11.8	-6.98	67 P	D	D	-6.1	-3.55	20 A	D	D	-6.1	-3.55	20 A	D	D
yz33d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element.	-1.3	-0.06	261 P	NC	NC	-1.6	-0.18	61 A	D	D	-1.6	-0.18	61 A	D	D
Human aorta cDNA 5'-end GEN-259H09.	-2.7	-0.9	621 P	NC	NC	1.1	0.01	181 A	D	D	1.1	0.01	181 A	D	D
zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'	1.2	0.03	201 P	D	D	-2	-0.41	129 A	D	D	-2	-0.41	129 A	D	D
yw20e07.r1 Homo sapiens cDNA clone 252804 5'.	1	0	449 P	NC	NC	1.1	0.02	34 A	D	D	1.1	0.02	34 A	D	D
Human mRNA for KIAA0389 gene, complete cds.	-1.6	-0.19	238 P	NC	NC	-1.4	-0.1	95 A	D	D	-1.4	-0.1	95 A	D	D
yq45h12.s1 Homo sapiens cDNA clone 35838 3'.	-1.9	-0.36	190 P	D	D	-2.1	-0.46	-83 A	D	D	-2.1	-0.46	-83 A	D	D
zr75g11.s1 Soares NihMPu S1 Homo sapiens cDNA clone 669284 3'.	-1.7	-0.2	57 P	D	D	-5.7	-2.89	32 A	D	D	-5.7	-2.89	32 A	D	D
EST89388 Small Intestine I Homo sapiens cDNA 5' end similar to monoamine oxidase A.															



Fig. 7.15

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

236 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp

data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	Q	U	D
ym26a10.s1 Homo sapiens cDNA clone 49155 3'	-4	-2.03 PPPPA	468	329	288	134	0
zv24d11.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 754561 3'	-8.9	-5.52 PPPPA	468	346	206	220	0
y197b11.s1 Homo sapiens cDNA clone 46276 3'	-5.9	-3.58 PPPPA	466	369	500	363	0
zo62h09.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591521 3' similar to SW:PPAP_RAT P20646 PROSTATIC ACID PHOSPHATASE PRECURSOR ;	-11.2	-6.71 PPPPA	464	332	318	621	0
zx15d06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786539 3'	-3.7	-1.73 PPPPA	451	312	322	342	0
z154g04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 726198 3' similar to gb:J05158 CARBOXYPEPTIDASE N 83 KD CHAIN (HUMAN);	-10.1	-6.12 PPPPA	442	358	299	294	0
zi59a08.s1 Soares testis NHT Homo sapiens cDNA clone 726614 3'	-10.3	-6.04 PPPPA	442	362	127	65	0
zx86d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810631 5'	-14.7	-7.4 PPPPA	436	290	189	-151	0
yb29e01.s1 Homo sapiens cDNA clone 72600 3'	-4.9	-2.63 PPPPA	432	427	615	440	0
zi54a11.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 667196 3'	-2.9	-1.06 PPPPA	420	344	371	508	0
zd92a04.r1 Soares fetal heart NbH19W Homo sapiens cDNA clone 356910 5' similar to contains element LTR3 repetitive element ;	-2.9	-0.78 PPPPA	415	423	353	374	0
yz33d11.s1 Homo sapiens cDNA clone 284853 3' similar to contains Alu repetitive element;	-6.6	-3.87 PPPPA	413	415	-337	57	0
Human aorta cDNA 5'-end GEN-259H09.	-6.6	-3.84 PPPPA	406	261	318	261	0
zu29h10.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739459 3'	-3.3	-1.63 PPPPA	403	482	151	621	0
yw20e07.r1 Homo sapiens cDNA clone 252804 5'	-3.1	-1.21 PPPPA	399	370	468	201	0
Human mRNA for KIAA0389 gene, complete cds.	-9.7	-5.6 PPPPA	392	365	409	449	0
yb45h12.s1 Homo sapiens cDNA clone 35638 3'	-3.5	-1.4 PPPPA	392	279	204	238	0
zi75g11.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 669284 3'	-10.3	-5.89 PPPPA	391	321	206	190	0
EST69388 Small intestine I Homo sapiens cDNA 5' end similar to monoamine oxidase A.	-9.6	-5.09 PPPPA	378	204	197	57	0

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Fig. 7.16

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A	B=A
yg15g06.s1 Homo sapiens cDNA clone 32365 3'	RC_R43365_at	376 P	162 P	NC	NC	NC	-2.3	-0.62	97 P	MD	NC	B=A	B=A
yl83h08.s1 Homo sapiens cDNA clone 44847 3'	RC_H06746_at	375 P	478 P	NC	NC	NC	1.3	0.07	568 P	NC	NC		
zr47f06.s1 Soares Nhl-MIPu S1 Homo sapiens cDNA clone 666553 3'	RC_AA233837_at	375 P	273 P	NC	NC	NC	-1.4	-0.09	480 P	NC	NC		
zr15h06.s1 Soares fetal heart Nhl-H19W Homo sapiens cDNA clone 377051 3'	RC_AA057620_at	374 P	159 P	NC	NC	NC	-2.4	-0.64	102 P	D	D		
zr42e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'	RC_AA450118_at	373 P	289 P	NC	NC	NC	-1.4	-0.1	243 P	NC	NC		
ae37b10.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897979 3'	RC_AA598872_at	373 P	260 P	NC	NC	NC	-1.4	-0.12	367 P	NC	NC		
zr52g06.s1 Soares pregnant uterus NhlPU Homo sapiens cDNA clone 505594 3'	RC_AA147646_s_at	364 P	294 P	NC	NC	NC	-1.2	-0.05	222 P	NC	NC		
zr94b05.s1 Soares parathyroid tumor NhlHPA Homo sapiens cDNA clone 320433 3'	RC_W04698_at	362 P	248 P	NC	NC	NC	-1.5	-0.12	205 P	NC	NC		
zr80a08.s1 Soares Nhl-MIPu S1 Homo sapiens cDNA clone 681974 3'	RC_N54365_at	359 P	190 P	NC	NC	NC	-1.9	-0.34	289 P	NC	NC		
zk62g01.r1 Soares pregnant uterus NhlPU Homo sapiens cDNA clone 487440 5'	RC_AA256208_at	350 P	333 P	NC	NC	NC	-1.1	0	269 P	NC	NC		
zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'	AA046593_at	350 P	565 P	NC	NC	NC	1.6	0.24	335 P	NC	NC		
zr81c12.s1 Soares Nhl-MIPu S1 Homo sapiens cDNA clone 682102 3'	RC_AA002088_at	346 P	255 P	NC	NC	NC	-1.4	-0.08	353 P	NC	NC		
aa46e04.r1 NC1 CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'	RC_AA256273_at	342 P	131 P	D	D	D	-4.2	-2.02	487 P	D	D		
zr15h03.s1 Soares ovary tumor NhlHOT Homo sapiens cDNA clone 726293 3'	AA491114_at	337 P	396 P	NC	NC	NC	-1	0	228 P	NC	NC		
zr184c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 511302 3'	RC_AA293719_at	336 P	365 P	NC	NC	NC	1.1	0.07	423 P	NC	NC		
zr44g07.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772884 3'	RC_AA086005_at	332 P	161 P	D	D	D	-1.9	-0.29	485 P	NC	NC		
zr70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to	RC_AA479885_at	326 P	202 P	NC	NC	NC	-1.6	-0.18	124 P	D	D		
SW:YB72 YEAST P38137 HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION :	AA442428_at	326 P	212 P	NC	NC	NC	-1.5	-0.15	487 P	NC	NC		
ab36b12.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'	RC_AA486410_at	323 P	215 P	NC	NC	NC	-1.5	-0.13	203 P	NC	NC		
yf89f02.r1 Homo sapiens cDNA clone 29665 5'	R15268_at	321 P	319 P	NC	NC	NC	1.1	0.01	151 P	D	D		

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Fig. 7.17

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data-sorted acc. To Avg Diff N

gene name	Fold Change T1gllip(vs)N	Sort Score T1gllip(vs)N	Avg Diff T2gllimixP	Abs Call T2gllimixP	Diff Call T2gllimixP(vs)N	B=A	Fold Change T2gllimixP(vs)N	Sort Score T2gllimixP(vs)N	Avg Diff T2gllisolidP	Abs Call T2gllisolidP	Diff Call T2gllisolidP(vs)N	B=A
ygl15g06.s1 Homo sapiens cDNA clone 32365 3'.	-3.7	-1.63	107 P	D	D		-3.5	-1.5	8 A	D	D	
y83h08.s1 Homo sapiens cDNA clone 44847 3'.	1.5	0.19	748 P	NC	NC		2	0.58	96 A	D	D	
z47f06.s1 Soares NrhMPu S1 Homo sapiens cDNA clone 666563 3'.	1.3	0.07	456 P	NC	NC		1.2	0.05	125 A	D	D	
zf15h06.s1 Soares fetal heart NrhH19W Homo sapiens cDNA clone 377051 3'.	-3.7	-1.68	-108 P	D	D		-13.8	-6.6	-78 A	D	D	
z442e09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'.	-1.5	-0.16	449 P	NC	NC		1.2	0.04	228 A	D	D	
ae37b10.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897979 3'.	-1	0	310 P	NC	NC		-1.2	-0.04	137 A	D	D	
z152g06.s1 Soares pregnant uterus NrhMPu Homo sapiens cDNA clone 505594 3'.	-1.6	-0.21	155 P	D	D		-2.4	-0.63	37 A	D	D	
z894b05.s1 Soares parathyroid tumor NrhHPA Homo sapiens cDNA clone 320433 3'.	-1.8	-0.27	292 P	NC	NC		-1.5	-0.14	139 A	D	D	
yv39c06.s1 Homo sapiens cDNA clone 245098 3'.	-1.2	-0.05	186 P	D	D		-1.9	-0.36	181 A	D	D	
zr80a08.s1 Soares NrhMPu S1 Homo sapiens cDNA clone 681974 3'.	-1.3	-0.06	261 P	NC	NC		-1.3	-0.08	40 A	D	D	
zk62g01.r1 Soares pregnant uterus NrhMPu Homo sapiens cDNA clone 487440 5'.	-1.2	-0.03	372 P	NC	NC		-1.1	0	154 A	D	D	
zh85g03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'.	1	0	384 P	NC	NC		1.1	0.02	-14 A	D	D	
zr81c12.s1 Soares NrhMPu S1 Homo sapiens cDNA clone 662102 3'.	-1.5	-0.13	1612 P	D	D		1.8	0.42	530 A	D	D	
aa46e04.r1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:823998 5'.	-1.2	-0.02	286 P	NC	NC		-1.5	-0.15	72 A	D	D	
z155h03.s1 Soares ovary tumor NrhOT Homo sapiens cDNA clone 726293 3'.	1.3	0.06	254 P	NC	NC		-1.1	-0.01	14 A	D	D	
z184c04.s1 Striatagene colon (#937204) Homo sapiens cDNA clone 511302 3'.	1.6	0.19	405 P	NC	NC		1.4	0.09	104 A	D	D	
zw44a07.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772684 3'.	-2.6	-0.77	222 P	NC	NC		-1.5	-0.12	83 A	D	D	
zv70f08.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to .	1.5	0.16	257 P	NC	NC		-1.3	-0.05	32 A	D	D	
SW:YB72_YEAST P38137 HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. ;												
ab36b12.s1 Striatagene HeLa cell s3 937216 Homo sapiens cDNA clone 842879 3'.	-1.6	-0.17	229 P	NC	NC		-1.4	-0.1	85 A	D	D	
yf89f02.r1 Homo sapiens cDNA clone 29665 5'.	-2.1	-0.46	170 P	D	D		-1.9	-0.32	46 A	D	D	

Fig. 7.18

17742 ESTs

AFFX, all NC, all A, 3xNC + M\*

&gt;= +/- 0.5 changing from N to tumor

PPPPA and DECREASED

PPPA and DECREASED in all 4 comp

iff N

	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	q	m	Q
cDNA clone 32365 3'	~-5.4	-2.58	PPPPA	376	162	97	107
cDNA clone 44847 3'	-3.9	-1.79	PPPPA	375	478	568	748
u S1 Homo sapiens cDNA clone 666563 3'	-3	-1.11	PPPPA	375	273	480	456
art NbHH19W Homo sapiens cDNA clone 377051 3'	~-12.0	-6.72	PPPPA	374	159	102	-108
lus Nb2HF8 9w Homo sapiens cDNA clone 789160 3'	-3.8	-1.69	PPPPA	373	269	243	449
tumor Homo sapiens cDNA clone 897979 3'	-2.7	-0.89	PPPPA	373	260	367	310
it uterus NbHPU Homo sapiens cDNA clone 505594 3'	~-9.0	-4.98	PPPPA	364	294	222	155
roid tumor NbHPA Homo sapiens cDNA clone 320433 3'	-3.1	-1.23	PPPPA	362	248	205	292
cDNA clone 245098 3'	-2.6	-0.81	PPPPA	359	190	289	186
u S1 Homo sapiens cDNA clone 681974 3'	~-7.9	-4.16	PPPPA	350	333	269	261
nt uterus NbHPU Homo sapiens cDNA clone 487440 5'	-2.6	-0.79	PPPPA	350	565	335	372
er spleen 1NFLS S1 Homo sapiens cDNA clone 428116 3'	~-6.1	-3.19	PPPPA	346	255	353	384
u S1 Homo sapiens cDNA clone 682102 3'	~-20.0	-9.04	PPPPA	342	131	487	1612
CB1 Homo sapiens cDNA clone IMAGE:823998 5'	-4.8	-2.37	PPPPA	337	396	228	286
tumor NbHOT Homo sapiens cDNA clone 726293 3'	~-8.8	-4.76	PPPPA	336	365	423	254
n (#937204) Homo sapiens cDNA clone 511302 3'	-2.9	-0.9	PPPPA	332	161	465	405
lus Nb2HF8 9w Homo sapiens cDNA clone 772884 3'	-4.3	-2.03	PPPPA	326	202	124	222
us Nb2HF8 9w Homo sapiens cDNA clone 759015 5' similar to	~-8.7	-4.63	PPPPA	326	212	487	257
HYPOTHETICAL 60.5 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION :							
La cell s3 937216 Homo sapiens cDNA clone 842879 3'	-3.8	-1.57	PPPPA	323	215	203	229
DNA clone 29665 5'	-7	-3.62	PPPPA	321	319	151	170

Fig. 7.19

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

238 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp

data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A
zw86a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783834 3' similar to	RC_AA443658_at	319 P	164 P	NC	NC	-2.1	-0.42	185 P	NC				
TR:G438639 G438639 LAMIN B RECEPTOR. [1] :													
ym39b01.s1 Homo sapiens cDNA clone 50559 3'.	RC_H16790_at	318 P	207 P	D	D	-1.5	-0.15	199 P	D				
zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.	AA465000_s_at	316 P	264 P	NC	NC	-1.2	-0.03	219 P	NC				
yy43e04.s1 Homo sapiens cDNA clone 274014 3'.	RC_N38930_at	315 P	251 P	NC	NC	-3.2	-1.15	123 P	NC				
Human mRNA for KIAA0323 gene, partial cds.	AB002321_at	314 P	436 P	NC	NC	1.4	0.11	285 P	NC				
H. sapiens partial cDNA sequence; clone c-0qpb09.	RC_Z38810_at	314 P	161 P	NC	NC	-1.9	-0.35	48 P	MD				
WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18	AC000115_cds1_at	310 P	145 P	NC	NC	-2	-0.35	436 P	NC				
zf63b02.s1 Soares NihIMPu S1 Homo sapiens cDNA clone 682251 3'.	RC_AA255464_at	308 P	247 P	NC	NC	-1	0	324 P	NC				
zs31g05.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.	RC_AA255628_at	308 P	105 P	NC	NC	-1.7	-0.16	107 P	NC				
y91a03.s1 Homo sapiens cDNA clone 212620 3'.	RC_H70554_at	305 P	113 P	NC	NC	-2.7	-0.8	339 P	NC				
EST180743 Jurkat T-cells V Homo sapiens cDNA 5' end.	AA309880_at	301 P	348 P	NC	NC	1.2	0.02	253 P	NC				
y921a08.s1 Homo sapiens cDNA clone 32940 3'.	RC_R43812_at	297 P	317 P	D	D	-1.5	-0.14	-112 P	MD				
zv47a04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756750 3'.	RC_AA425636_at	297 P	291 P	NC	NC	-2.3	-0.54	599 P	NC				
yz39f01.s1 Homo sapiens cDNA clone 285433 3'.	RC_N66388_at	295 P	161 P	NC	NC	-1.3	-0.04	205 P	NC				
zs85d09.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to	RC_AA279420_at	295 P	430 P	NC	NC	1.5	0.14	206 P	NC				
TR:G974805 G974805 T08A11.2.													
zi05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.	RC_AA033974_at	291 P	241 P	NC	NC	-1.2	-0.03	216 P	NC				
Homo sapiens sodium bicarbonate cotransporter (HNBC1) mRNA, complete cds.	AF007216_at	289 P	49 P	D	D	-4.5	-1.67	77 P	D				
aa56h11.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.	RC_AA489101_at	289 P	165 P	NC	NC	-1.8	-0.24	160 P	NC				
Human aorta cDNA 5'-end GEN:286G10.	DT9601_f_at	285 P	217 P	NC	NC	-1.2	-0.02	168 P	D				
yw70d05.s1 Homo sapiens cDNA clone 257601 3'.	RC_N30856_at	285 P	132 P	MD	MD	-2.2	-0.45	385 P	NC				

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Fig. 7.20

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1gillP(vs)N	Sort Score T1gillP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A
zw86a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 763834 3' similar to TR:G438639 G438639 LAMIN B RECEPTOR. [1];	-1.7	-0.23	501 P	NC			1.3	0.08	189 A	D		
ym39b01.s1 Homo sapiens cDNA clone 50559 3'.	-1.6	-0.18	207 P	NC			-1.5	-0.15	116 A	D		
zx80b07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.	-1.3	-0.07	183 P	NC			-1.7	-0.23	70 A	D		
yy43e04.s1 Homo sapiens cDNA clone 274014 3'.	-2.6	-0.72	623 P	NC			2	0.51	-17 A	D		
Human mRNA for KIAA0323 gene, partial cds.	-1.1	-0.01	-391 P	NC			-21.3	-8.68	-1391 A	D		
H. sapiens partial cDNA sequence; clone c-0qb09.	-6.6	-3.35	210 P	NC			-1.5	-0.13	380 A	D		
WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18	1.7	0.27	298 P	NC			1.3	0.05	96 A	D		
zr83b02.s1 Soares NhlhMPu S1 Homo sapiens cDNA clone 682251 3'.	1.1	0	313 P	NC			1	0	-135 A	D		
zs31g06.s1 NCI CGAP GCB1 Homo sapiens cDNA clone IMAGE:688842 3'.	-1.7	-0.15	93 P	NC			-1.9	-0.24	24 A	D		
yr91a03.s1 Homo sapiens cDNA clone 212620 3'.	1.1	0.01	130 P	NC			-2.4	-0.58	-21 A	D		
EST180743 Jurkat T-cells V Homo sapiens cDNA 5' end.	-1.2	-0.03	353 P	NC			1.2	0.03	107 A	D		
yg21a08.s1 Homo sapiens cDNA clone 32940 3'.	-9.5	-4.82	-71 P	D			-7.1	-3.44	176 A	D		
zv47a04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756750 3'.	1.2	0.03	447 P	NC			-1.5	-0.12	165 A	D		
yz39f01.s1 Homo sapiens cDNA clone 285433 3'.	-1	0	227 P	NC			-1.3	-0.06	100 A	D		
zs85d09.s1 NCI CGAP GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2.;	-1.2	-0.02	328 P	NC			1.4	0.09	72 A	D		
zli05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.	-1.3	-0.07	208 P	NC			-1.6	-0.17	105 A	D		
Homo sapiens sodium bicarbonate cotransporter (HNBC1) mRNA, complete cds.	-2.8	-0.75	20 P	D			-7.6	-3.27	4 A	D		
aa56h11.s1 NCI CGAP GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.	-1.8	-0.27	215 P	NC			-1.3	-0.07	-136 A	D		
Human aorta cDNA 5'-end GEN:286G10.	-1.7	-0.21	136 P	D			-1.8	-0.25	60 A	D		
yw70f05.s1 Homo sapiens cDNA clone 257601 3'.	1.4	0.09	729 P	I			2.6	1.09	-27 A	D		

Fig. 7.21

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T2gillsolidP(vs)N	Sort Score T2gillsolidP(vs)N	Abs Calls	Z	P	W	U	D
zw86a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783834 3' similar to TR:G438639 G438639 LAMIN B RECEPTOR. [1] ;	-2.7	-0.86	PPPPA	319	154	185	501	0
ym39b01.s1 Homo sapiens cDNA clone 50559 3'.	-2.7	-0.83	PPPPA	318	207	199	207	0
zx80b07.t1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810037 5'.	-4.5	-2.04	PPPPA	316	264	219	183	0
yy43e04.s1 Homo sapiens cDNA clone 274014 3'.	-5.8	-2.77	PPPPA	315	251	123	623	0
Human mRNA for KIAA0323 gene, partial cds.	-26.5	-10.28	PPPPA	314	436	285	391	0
H. sapiens partial cDNA sequence; clone c-0qb09.	-2.6	-0.73	PPPPA	314	161	48	210	0
WUGSC:H_GS188P18.1a gene extracted from Human BAC clone GS188P18	-5	-2.38	PPPPA	310	145	436	298	0
zr83b02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682251 3'.	-11.8	-6.07	PPPPA	308	247	324	313	0
zs31g06.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686842 3'.	-4.8	-1.63	PPPPA	308	105	107	93	0
y91a03.s1 Homo sapiens cDNA clone 212620 3'.	-7.7	-4.15	PPPPA	305	113	339	130	0
EST180743 Jurkat T-cells V Homo sapiens cDNA 5' end.	-2.8	-0.86	PPPPA	301	348	253	353	0
y921a08.s1 Homo sapiens cDNA clone 32940 3'.	-1.5	-0.13	PPPPA	297	317	112	71	0
zv47a04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756750 3'.	-2	-0.41	PPPPA	297	291	599	447	0
yz39f01.s1 Homo sapiens cDNA clone 285433 3'.	-3	-0.95	PPPPA	295	161	205	227	0
zs85d09.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704273 3' similar to TR:G974805 G974805 T08A11.2 ;	-3.3	-1.06	PPPPA	295	430	206	328	0
z05c10.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429906 3'.	-3.1	-1.11	PPPPA	291	241	216	208	0
Homo sapiens sodium bicarbonate cotransporter (HNBC1) mRNA, complete cds.	-6.2	-2.59	PPPPA	289	49	77	20	0
aa56h11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824997 3'.	-11.4	-5.67	PPPPA	289	165	160	215	0
Human aorta cDNA 5' end GEN:286G10.	-4.7	-2.09	PPPPA	285	217	168	136	0
yw70f05.s1 Homo sapiens cDNA clone 257601 3'.	-5.0	-2.02	PPPPA	265	132	385	729	0

Fig. 7.22

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets Incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A
Homo sapiens cdk2 mRNA, complete cds	L29218_s_at	282 P	164 P	420 P	152 P	296 P	NC	NC	-1.7	-0.22	1.5	0.15	296 P
Homo sapiens cdk2 mRNA, complete cds	RC_AA143726_at	282 P	164 P	420 P	152 P	296 P	NC	NC	-1.7	-0.22	1.5	0.15	296 P
zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to	AA126592_at	280 P	226 P	226 P	191 P	191 P	NC	NC	-1.2	-0.04	1.2	-0.04	191 P
TR:G530823 G530823 EPIDERMAL GROWTH FACTOR RECEPTOR KINASE SUBSTRATE ;	RC_F02397_s_at	278 P	204 P	204 P	313 P	313 P	NC	NC	-1.8	-0.26	1.8	-0.26	313 P
z117g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'	RC_AA252765_at	273 P	165 P	165 P	254 P	254 P	D	NC	-2	-0.35	2	-0.35	254 P
H. sapiens partial cDNA sequence; clone c-0x11.	RC_W46846_at	271 P	309 P	309 P	635 P	635 P	NC	NC	1.3	0.06	1.3	0.06	635 P
zs27d03.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'	RC_AA135185_at	270 P	395 P	395 P	201 P	201 P	NC	NC	1.6	0.19	1.6	0.19	201 P
zc36a04.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324366 3'	RC_R40702_at	260 P	455 P	455 P	612 P	612 P	NC	NC	1.7	0.29	1.7	0.29	612 P
zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'	RC_N52565_at	257 P	519 P	519 P	326 P	326 P	I	NC	1.7	0.29	1.7	0.29	326 P
yf73f10.s1 Homo sapiens cDNA clone 27969 3'	RC_W32505_s_at	253 P	341 P	341 P	827 P	827 P	I	NC	1.1	0	1.1	0	827 P
yc06a02.s1 Soares parathyroid tumor NbHFA Homo sapiens cDNA clone 321482 3'	RC_AA255539_at	248 P	276 P	276 P	144 P	144 P	NC	NC	1.1	0.01	1.1	0.01	144 P
zr85c04.s1 Soares NtHMPu S1 Homo sapiens cDNA clone 682470 3'	RC_AA449951_at	246 P	233 P	233 P	323 P	323 P	NC	NC	-1.1	0	-1.1	0	323 P
zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'	AA091278_at	244 P	292 P	292 P	206 P	206 P	NC	NC	1.2	0.03	1.2	0.03	206 P
cchn2404.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'	RC_AA236037_at	241 P	164 P	164 P	402 P	402 P	NC	NC	-1.1	-0.01	-1.1	-0.01	402 P
zs05g08.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'	AA091412_s_at	239 P	413 P	413 P	204 P	204 P	NC	NC	1.4	0.11	1.4	0.11	204 P
lj2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'	AA046865_at	236 P	147 P	147 P	119 P	119 P	D	NC	-1.6	-0.15	-1.6	-0.15	119 P
zr12b09.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376697 5'	AA324825_at	234 P	383 P	383 P	423 P	423 P	I	NC	1.6	0.21	1.6	0.21	423 P
EST27743 Cerebellum II Homo sapiens cDNA 5' end.	RC_AA454840_s_at	233 P	121 P	121 P	58 P	58 P	NC	MD	-1.5	-0.09	-1.5	-0.09	58 P
zx79d09.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 809969 3'	RC_W60354_at	223 P	140 P	140 P	308 P	308 P	NC	NC	-1.6	-0.15	-1.6	-0.15	308 P
zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'	RC_AA402484_at	221 P	68 P	68 P	94 P	94 P	MD	D	-3.3	-1	-3.3	-1	94 P
z165c03.s1 Soares testis NHT Homo sapiens cDNA clone 727204 3'	W26883_at	220 P	210 P	210 P	162 P	162 P	NC	NC	-1.2	-0.03	-1.2	-0.03	162 P
15h10 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.													



41/137

Fig. 7.23

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1gllp(vs)N	Sort Score T1gllp(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	B=A	Fold Change T2gllmixP(vs)N	Sort Score T2gllmixP(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	B=A
Homo sapiens clk2 mRNA, complete cds	-1.9	-0.28	236 P	NC	NC		-1.2	-0.03	181 A	D		B=A
zo67g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to	1.7	0.23	210 P	NC	NC		1.2	0.03	-143 A	D		
TR:G530823 G530823 EPIDERMAL GROWTH FACTOR RECEPTOR KINASE SUBSTRATE. ;												
z17g05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.	-1.5	-0.11	171 P	NC	NC		-1.6	-0.18	94 A	D		
H. sapiens partial cDNA sequence, clone c-0xh11.	-1.1	-0.02	231 P	NC	NC		-1.2	-0.03	99 A	D		
zs27d03.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.	-1.3	-0.05	198 P	NC	NC		-1.4	-0.08	50 A	D		
zc36a04.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324366 3'.	2.7	1.23	505 P	NC	NC		2.1	0.6	169 A	D		
zo27a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588080 3'.	-1.3	-0.07	156 P	NC	NC		-1.7	-0.22	-7 A	D		
y173f10.s1 Homo sapiens cDNA clone 27969 3'.	1.5	0.17	331 P	NC	NC		1.3	0.05	-6 A	D		
yw36d12.s1 Homo sapiens cDNA clone 244823 3'.	1.3	0.05	288 P	NC	NC		1.1	0.01	104 A	D		
zcd6a02.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321482 3'.	3.3	1.94	438 P	NC	NC		1.7	0.28	134 A	D		
zr85c04.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 682470 3'.	-1.7	-0.21	302 P	NC	NC		1.2	0.04	93 A	D		
zx38a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.	1.3	0.07	278 P	NC	NC		1.1	0.02	62 A	D		
ccch2404.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	-1.2	-0.02	232 P	NC	NC		-1.1	0	96 A	D		
zs05g08.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.	1.7	0.23	203 P	NC	NC		-1.2	-0.03	20 A	D		
ll2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	-1.2	-0.02	280 P	NC	NC		-1.1	-0.01	24 A	D		
zr12b09.r1 Soares fetal heart NbH19W Homo sapiens cDNA clone 376697 5'.	-1.9	-0.28	136 P	NC	NC		-1.7	-0.2	26 A	D		
EST127743 Cerebellum II Homo sapiens cDNA 5' end.	1.8	0.32	232 P	NC	NC		1.3	0.05	50 A	D		
zx79d09.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 809969 3'.	-3.1	-0.8	75 P	NC	NC		-2.4	-0.45	19 A	D		
zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415370 3'.	1.4	0.09	214 P	NC	NC		-1	0	75 A	D		
z165c03.s1 Soares testis NHT Homo sapiens cDNA clone 727204 3'.	-2.4	-0.5	201 P	D	D		-4.2	-1.54	50 A	D		
15h10 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	-1.5	-0.13	110 P	D	D		-2.3	-0.47	40 A	D		

Fig. 7.24

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp-  
 data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	Y	M	Q
Homo sapiens cdk2 mRNA, complete cds	-2,3	-0,58	PPPPA	282	164	152	236
z067g06.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 591994 3' similar to	~5,5	-1,6	PPPPA	282	420	296	210
TR:G530823 G530823 EPIDERMAL GROWTH FACTOR RECEPTOR KINASE SUBSTRATE. 1:							
z117g05.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 502232 5'.	-3	-0,95	PPPPA	280	226	191	171
H. sapiens partial cDNA sequence; clone c-0xt11.	-4,1	-1,65	PPPPA	278	204	313	231
z027003.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:686405 3'.	~5,8	-2,44	PPPPA	273	165	254	198
z036a04.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324366 3'.	-1,6	-0,17	PPPPA	271	309	635	505
z027a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 586080 3'.	~8,5	-4,09	PPPPA	270	395	201	156
yf73f10.s1 Homo sapiens cDNA clone 27969 3'.	~6,4	-3,45	PPPPA	260	455	612	331
yv35d12.s1 Homo sapiens cDNA clone 244823 3'.	-2,5	-0,59	PPPPA	257	519	326	288
z006a02.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 321482 3'.	-1,9	-0,28	PPPPA	253	341	827	438
zr85c04.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 682470 3'.	-2,7	-0,69	PPPPA	248	276	144	302
z038a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788730 3'.	-4	-1,48	PPPPA	246	233	323	278
cchn2404.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	-2,5	-0,62	PPPPA	244	292	206	232
zs05g08.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684350 3'.	-3	-0,86	PPPPA	241	164	402	203
il2053.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	~7,7	-3,45	PPPPA	239	413	204	280
zf12b09.r1 Soares fetal heart NbH19W Homo sapiens cDNA clone 376697 5'.	~5,9	-2,52	PPPPA	236	147	119	136
EST27743 Cerebellum II Homo sapiens cDNA 5' end.	-3,5	-1,04	PPPPA	234	383	423	232
zx79d09.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 809969 3'.	~4,9	-1,69	PPPPA	233	121	58	75
zh49a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 413370 3'.	-3	-0,84	PPPPA	223	140	308	214
z165c03.s1 Soares testis NHT Homo sapiens cDNA clone 727204 3'.	-4,5	-1,7	PPPPA	221	68	94	201
15h10 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	~5,4	-2,2	PPPPA	220	210	162	110

Fig. 7.25

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A
zst17h07.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.	RC_AA262485_at	219 P	178 P	178 P	178 P	NC	NC	-1.2	-0.03	115 P	115 P	NC	NC
zw39c01.s1 Soares total fetus Nb2Hf8 9w Homo sapiens cDNA clone 772416 3'.	RC_AA405543_at	219 P	244 P	244 P	244 P	NC	NC	1.1	0.01	240 P	240 P	NC	NC
ya54c04.s1 Homo sapiens cDNA clone 265542 3'.	RC_N21380_at	218 P	378 P	378 P	378 P	NC	NC	1.7	0.26	6 P	6 P	NC	NC
z177a05.s1 Stratagene NT2 neuronal precursor 837230 Homo sapiens cDNA clone 564176 3'.	RC_AA121360_s_at	217 P	181 P	181 P	181 P	NC	NC	-1.2	-0.03	171 P	171 P	NC	NC
Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.	L32832_s_at	210 P	322 P	322 P	322 P	NC	NC	1.5	0.15	268 P	268 P	NC	NC
Human fetal-lung cDNA 5'-end sequence.	D31313_s_at	209 P	396 P	396 P	396 P	NC	NC	1.3	0.06	163 P	163 P	NC	NC
ym45b05.r1 Homo sapiens cDNA clone 51043 5' similar to contains Alu repetitive element.	H18718_at	209 P	174 P	174 P	174 P	NC	NC	-1.2	-0.03	203 P	203 P	NC	NC
zf03g09.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 375904 3'.	RC_AA037828_at	207 P	103 P	103 P	103 P	NC	NC	-1.6	-0.15	97 P	97 P	NC	NC
yi04c10.s1 Homo sapiens cDNA clone 138258 3'.	RC_R67996_at	203 P	113 P	113 P	113 P	NC	NC	-2.1	-0.36	788 P	788 P	MI	MI
ze92g08.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 366494 3'.	RC_AA028417_at	202 P	236 P	236 P	236 P	NC	NC	-1.1	-0.01	167 P	167 P	NC	NC
H. sapiens partial cDNA sequence; clone c-33a10.	RC_F11115_at	199 P	216 P	216 P	216 P	NC	NC	1.1	0.01	89 P	89 P	D	D
yf21e07.s1 Homo sapiens cDNA clone 127524 3'.	RC_R08871_at	192 P	89 P	89 P	89 P	D	D	-2.2	-0.37	123 P	123 P	NC	NC
z12e05.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648608 3'.	RC_AA224324_at	188 P	115 P	115 P	115 P	NC	NC	-1.6	-0.15	107 P	107 P	D	D
z150c01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725760 3'.	RC_AA399226_at	187 P	100 P	100 P	100 P	MD	MD	-1.9	-0.24	94 P	94 P	D	D
yi25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element.	R66920_at	184 P	208 P	208 P	208 P	NC	NC	1.1	0.01	284 P	284 P	NC	NC
zx81a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810128 3'.	RC_AA464240_s_at	182 P	70 P	70 P	70 P	NC	NC	-2.6	-0.56	18 P	18 P	NC	NC
zv08g07.r1 Soares NbHMPu S1 Homo sapiens cDNA clone 753084 5'.	AA436536_at	178 P	225 P	225 P	225 P	NC	NC	1.3	0.04	267 P	267 P	NC	NC
yz34f07.s1 Homo sapiens cDNA clone 284965 3'.	RC_N71875_at	176 P	147 P	147 P	147 P	NC	NC	-1.2	-0.03	99 P	99 P	NC	NC
zk10b03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470093 3' similar to PIR:H45193 H45193 zinc finger protein ZNF65.	RC_AA029288_at	176 P	76 P	76 P	76 P	D	D	-2.3	-0.41	142 P	142 P	NC	NC
yi63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR.	H27242_at	175 P	223 P	223 P	223 P	NC	NC	1.3	0.04	140 P	140 P	NC	NC

Fig. 7.26

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1gillP(vs)N	Sort Score T1gillP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A
zs17h07.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.	-1,1	-0,01	207 P	NC	NC	NC	-1,1	0	-20 A	D	D	D
zlw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 772416 3'.	-1,3	-0,05	233 P	NC	NC	NC	1,1	0	71 A	D	D	D
yy54c04.s1 Homo sapiens cDNA clone 265542 3'.	~5,4	-2,16	54 P	NC	NC	NC	~3,7	-1,23	37 A	D	D	D
zn77a05.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 564176 3'.	-1,3	-0,04	184 P	NC	NC	NC	-1,2	-0,02	67 A	D	D	D
Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.	1,3	0,05	200 P	NC	NC	NC	-1,4	-0,1	-254 A	D	D	D
Human fetal-lung cDNA 5'-end sequence.	-1,3	-0,04	487 P	NC	NC	NC	1,4	0,1	-11 A	D	D	D
ym45b05.r1 Homo sapiens cDNA clone 51043 5' similar to contains Alu repetitive element.	-1	0	236 P	NC	NC	NC	1,1	0,02	75 A	D	D	D
zif03g09.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 375904 3'.	-1,8	-0,18	88 P	NC	NC	NC	-1,9	-0,25	21 A	D	D	D
yi04c10.s1 Homo sapiens cDNA clone 138258 3'.	3,9	2,56	297 P	NC	NC	NC	2	0,34	132 A	D	D	D
ze92g08.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 366494 3'.	-1,2	-0,03	166 P	NC	NC	NC	1	0	70 A	D	D	D
H. sapiens partial cDNA sequence; clone C-33a10.	-2,2	-0,41	105 P	NC	NC	NC	-1,9	-0,26	49 A	D	D	D
yz12e07.s1 Homo sapiens cDNA clone 127524 3'.	-1,6	-0,12	138 P	D	D	D	-1,7	-0,19	17 A	D	D	D
zr12e05.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648608 3'.	-1,8	-0,2	133 P	NC	NC	NC	-1,4	-0,08	74 A	D	D	D
zi50c01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725760 3'.	-2	-0,29	124 P	NC	NC	NC	-1,5	-0,1	29 A	D	D	D
yz25f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element.	1,5	0,14	159 P	NC	NC	NC	1,2	0,03	-110 A	D	D	D
zx81a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810126 3'.	~9,1	-3,57	39 P	D	D	D	-4,7	-1,63	-156 A	D	D	D
zv08g07.r1 Soares NbHMPu S1 Homo sapiens cDNA clone 753084 5'.	1,2	0,02	285 P	NC	NC	NC	1,6	0,17	15 A	D	D	D
yz34f07.s1 Homo sapiens cDNA clone 284965 3'.	-1,8	-0,19	143 P	NC	NC	NC	-1,2	-0,03	17 A	D	D	D
zk10b03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470093 3' similar to PIR:H45193 H45193 zinc finger protein ZNF65.	-1,2	-0,03	92 P	NC	NC	NC	-1,8	-0,19	22 A	D	D	D
yz63h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR.	-1,2	-0,03	160 P	NC	NC	NC	-1,1	-0,01	-32 A	D	D	D

Fig. 7.27

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 238 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	S	D	U
zs17h07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685501 3'.	~4.6	-1.24 PPPPA	219	178	115	207	0
zw39c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone T72416 3'.	~6.5	-2.72 PPPPA	219	244	240	233	0
yx54c04.s1 Homo sapiens cDNA clone 265542 3'.	~5.2	-2.52 PPPPA	218	378	6	54	0
zn77a05.s1 Stratagene NT2 neuronal precursor 337230 Homo sapiens cDNA clone 564176 3'.	-2.7	-0.62 PPPPA	217	181	171	184	0
Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds.	~13.5	-6.28 PPPPA	210	322	268	200	0
Human fetal-lung cDNA 5'-end sequence.	~6.4	-2.58 PPPPA	209	396	163	487	0
ym45b05.r1 Homo sapiens cDNA clone 51043 5' similar to contains Alu repetitive element.	-2.8	-0.7 PPPPA	209	174	203	236	0
z103g09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 375904 3'.	~4.7	-1.59 PPPPA	207	103	97	88	0
yo4c10.s1 Homo sapiens cDNA clone 138258 3'.	-1.5	-0.12 PPPPA	203	113	788	297	0
ze92g08.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366494 3'.	-3.7	-1.32 PPPPA	202	236	167	166	0
H. sapiens partial cDNA sequence; clone c-33a10.	~3.2	-0.86 PPPPA	199	216	89	105	0
yf21e07.s1 Homo sapiens cDNA clone 127524 3'.	~3.5	-0.97 PPPPA	192	89	123	138	0
z172e05.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648608 3'.	-2.5	-0.55 PPPPA	188	115	107	133	0
z150c01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 725760 3'.	~4.8	-1.73 PPPPA	187	100	94	124	0
y125f09.r1 Homo sapiens cDNA clone 140297 5' similar to contains Alu repetitive element.	~7.0	-2.63 PPPPA	184	208	284	159	0
zx81a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810128 3'.	~9.3	-3.52 PPPPA	182	70	18	39	0
zv08g07.r1 Soares NhhMMPu S1 Homo sapiens cDNA clone 753084 5'.	~4.7	-1.3 PPPPA	178	225	267	285	0
y234f07.s1 Homo sapiens cDNA clone 284965 3'.	~3.4	-0.88 PPPPA	176	147	99	143	0
zk10b03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470093 3' similar to PIR:H45193 H45193 zinc finger protein ZNF65 ;.	~4.6	-1.52 PPPPA	176	76	142	92	0
y163h11.r1 Homo sapiens cDNA clone 162981 5' similar to SP:GCN5_YEAST Q03330 TRANSCRIPTIONAL ACTIVATOR ;.	~6.0	-2.17 PPPPA	175	223	140	160	0

Fig. 7.28

EST Bladder candidates of 17742 EST's  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A
Human cytochrome P450 PCN3 gene, complete cds													
ba32h08.s1 NCL CGAP_GCB1-Homo sapiens cDNA clone IMAGE:815007 3'	J04813_s_at	174 P	81 P	81 P	81 P	D	D	-2.4	-0.38	108 P	D	D	D
zs91c05.s1 NCL CGAP_GCB1-Homo sapiens cDNA clone IMAGE:704840 3'	RC_AA465093_at	174 P	138 P	138 P	138 P	NC	NC	-1.4	-0.08	135 P	NC	NC	NC
z83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	RC_AA282791_at	173 P	250 P	250 P	250 P	NC	NC	1.4	0.1	240 P	NC	NC	NC
zo03d03.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566597 3'	RC_AA464180_at	172 P	210 P	210 P	210 P	NC	NC	1.5	0.13	159 P	NC	NC	NC
zr82h09.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 682241 3'	RC_AA149987_at	169 P	219 P	219 P	219 P	NC	NC	1.3	0.05	357 P	NC	NC	NC
zr50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'	RC_AA256680_at	168 P	30 P	30 P	30 P	D	D	-6.7	-2.77	97 P	D	D	D
y180c10.r1 Homo sapiens cDNA clone 145554 5'	AA147510_s_at	166 P	195 P	195 P	195 P	NC	NC	1.2	0.02	229 P	NC	NC	NC
H. sapiens partial cDNA sequence; clone c-0ac03.	R78119_at	165 P	93 P	93 P	93 P	NC	NC	-1.8	-0.19	98 P	NC	NC	NC
zs58f12.s1 NCL CGAP_GCB1-Homo sapiens cDNA clone IMAGE:701711 3'	RC_Z38407_s_at	160 P	81 P	81 P	81 P	NC	NC	-2	-0.27	168 P	NC	NC	NC
ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'	RC_AA287107_s_at	159 P	133 P	133 P	133 P	NC	NC	-1.2	-0.02	73 P	D	D	D
zu47g07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:826629 5'	RC_AA287042_at	157 P	63 P	63 P	63 P	NC	NC	-1.4	-0.06	73 P	NC	NC	NC
zr55e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773994 3'	AA489299_at	157 P	307 P	307 P	307 P	NC	NC	1.4	0.08	156 P	NC	NC	NC
zr02a10.s1 NCL CGAP_GCB1-Homo sapiens cDNA clone IMAGE:711930 3'	AA504744_at	157 P	113 P	113 P	113 P	NC	NC	-1.7	-0.16	176 P	NC	NC	NC
zk75a04.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486622 5'	RC_AA402622_at	155 P	180 P	180 P	180 P	NC	NC	1.2	0.02	325 P	NC	NC	NC
zr94b04.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 767407 5'	RC_AA436628_at	146 P	66 P	66 P	66 P	D	D	-1.9	-0.19	162 P	NC	NC	NC
zr65f06.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 666291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8, [1];	RC_AA282138_at	142 P	119 P	119 P	119 P	NC	NC	-1.2	-0.02	41 P	D	D	D
af12f04.s1 Soares testis NHT Homo sapiens cDNA clone 1031455 3'	AA045870_at	142 P	124 P	124 P	124 P	NC	NC	-1.1	-0.01	64 P	NC	NC	NC
	AA418098_at	142 P	301 P	301 P	301 P	NC	NC	1.1	0.01	109 P	NC	NC	NC
	RC_AA242799_at	141 P	63 P	63 P	63 P	NC	NC	-1.5	-0.11	121 P	NC	NC	NC
	RC_AA609210_at	139 P	54 P	54 P	54 P	D	D	-2.6	-0.48	145 P	NC	NC	NC

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Fig. 7.29

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmixP	Abs Call T2glllmixP	Diff Call T2glllmixP(vs)N	Fold Change T2glllmixP(vs)N	Sort Score T2glllmixP(vs)N	Avg Diff T2glllmixP	Abs Call T2glllmixP	Diff Call T2glllmixP(vs)N
Human cytochrome P450 PCN3 gene, complete cds										
aa32h08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815007 3'	-1.8	-0.17	67 P	D	D	-3.6	-1.09	-10 A	D	D
zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'	-1.3	-0.04	134 P	NC	NC	-1.4	-0.06	85 A	D	D
zx83f04.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810367 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	1.4	0.08	210 P	NC	NC	1.2	0.03	36 A	D	D
gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	1.1	0.01	130 P	NC	NC	1	0	-9 A	D	D
zo03d03.s1 Striatagene colon (#937204) Homo sapiens cDNA clone 566597 3'	1.9	0.3	261 P	NC	NC	1.5	0.14	23 A	D	D
zr82h09.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 582241 3'	-1.6	-0.13	76 P	D	D	-2.7	-0.64	33 A	D	D
zl50c12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505366 5'	1.4	0.08	143 P	NC	NC	-2	-0.28	-138 A	D	D
yl80c10.r1 Homo sapiens cDNA clone 145554 5'	-1.4	-0.06	72 P	D	D	-2.7	-0.65	-35 A	D	D
H. sapiens partial cDNA sequence; clone c-0ac03.	1.1	0	83 P	NC	NC	-1.9	-0.24	45 A	D	D
zs58f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701711 3'	-2.2	-0.33	81 P	D	D	-2	-0.25	36 A	D	D
zs57e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701604 3'	-1.1	-0.01	123 P	NC	NC	-1.2	-0.02	47 A	D	D
ab35g04.r1 Striatagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'	-1.4	-0.09	144 P	NC	NC	-1.1	-0.01	-103 A	D	D
aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'	-1.1	-0.01	187 P	NC	NC	1	0	20 A	D	D
zu47g07.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741180 3'	2.1	0.44	120 P	D	D	-5.4	-1.84	91 A	D	D
zw55e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773994 3'	1.1	0.01	169 P	NC	NC	1.2	0.02	16 A	D	D
zi02a10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711930 3'	-3.5	-0.89	46 P	D	D	-2.6	-0.45	30 A	D	D
zk75a04.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488622 5'	-2.1	-0.29	69 P	D	D	-2.3	-0.39	48 A	D	D
zu94b04.r1 Soares NIHMPu S1 Homo sapiens cDNA clone 767407 5'	-1.3	-0.04	161 P	NC	NC	1.1	0.01	16 A	D	D
zr65f06.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 668291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8. [1] ;	-3.7	-0.93	50 P	NC	NC	-2.8	-0.59	-129 A	D	D
af12f04.s1 Soares testis NHT Homo sapiens cDNA clone 1031455 3'	1	0	68 P	D	D	-2.1	-0.27	50 A	D	D

Fig. 7.30

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

236 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	q	m	o	p
Human cytochrome P450 PCN3 gene, complete cds								
aa32h08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815007 3'	~4.5	-1.25 PPPPA	174	81	108	67	0	0
zs91c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704840 3'	-2.6	-0.55 PPPPA	174	138	135	134	0	0
z83f04.s1 Soares ovary tumor NBHOT: Homo sapiens cDNA clone 810367 3' similar to gb:U38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	~4.4	-1.43 PPPPA	173	250	240	210	0	0
gb:U38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	~5.4	-1.87 PPPPA	172	210	159	130	0	0
z003a003.s1 Stratagene colon (#837204) Homo sapiens cDNA clone 566597 3'	~4.6	-1.49 PPPPA	169	219	357	261	0	0
z82h09.s1 Soares NIH-HMPu S1 Homo sapiens cDNA clone 682241 3'	~5.2	-2 PPPPA	168	30	97	76	0	0
z150c12.r1 Soares pregnant uterus NBHPU Homo sapiens cDNA clone 505366 5'	~7.2	-2.52 PPPPA	166	195	229	143	0	0
y180c10.r1 Homo sapiens cDNA clone 145554 5'	~5.1	-1.89 PPPPA	165	93	98	72	0	0
H. sapiens partial cDNA sequence; clone c-0ac03.	~2.8	-0.6 PPPPA	160	81	168	83	0	0
zs58f12.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701711 3'	~4.0	-1.2 PPPPA	159	133	73	81	0	0
zs57e07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701604 3'	-2.9	-0.65 PPPPA	157	63	73	123	0	0
ab35g04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842838 5'	~7.4	-2.49 PPPPA	157	307	156	144	0	0
aa63f03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825629 5'	~4.6	-1.43 PPPPA	157	113	176	187	0	0
zu47g07.s1 Soares ovary tumor NBHOT: Homo sapiens cDNA clone 741180 3'	~5.1	-1.61 PPPPA	155	180	325	120	0	0
zw55e10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773994 3'	~4.0	-1.1 PPPPA	146	66	162	169	0	0
z102a10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711930 3'	~3.7	-0.99 PPPPA	142	119	41	46	0	0
zk75a04.r1 Soares pregnant uterus NBHPU Homo sapiens cDNA clone 488622 5'	-2.8	-0.57 PPPPA	142	124	64	69	0	0
zv94b04.r1 Soares NIH-HMPu S1 Homo sapiens cDNA clone 767407 5'	~5.2	-1.54 PPPPA	142	301	109	161	0	0
z165f06.s1 Soares NIH-HMPu S1 Homo sapiens cDNA clone 688291 3' similar to SW:SPO8_YEAST P41833 TRANSCRIPTIONAL REGULATOR SPO8. [1];	~7.6	-2.37 PPPPA	141	63	121	50	0	0
af12f04.s1 Soares testis NBHT Homo sapiens cDNA clone 1031455 3'	~3.8	-0.99 PPPPA	139	54	145	68	0	0



Fig. 7.31

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A
zo13e11.s1 Stratiagena colon (#937204) Homo sapiens cDNA clone 586796 3'	RC_AA133469_at	138 P	561 P	561 P	I	I	3.3	1.46	1137 P	I	I	I	I
yh25b11.r1 Homo sapiens cDNA clone 130749 5'	R22139_at	137 P	99 P	99 P	NC	NC	-1.4	-0.06	232 P	MI	MI	MI	MI
EST176117 Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end.	AA305116_at	135 P	76 P	76 P	NC	NC	-1.2	-0.02	67 P	D	D	D	D
zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'	RC_AA027954_at	134 P	281 P	281 P	NC	NC	1.2	0.03	255 P	NC	NC	NC	NC
zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'	AA036900_at	134 P	871 P	871 P	NC	NC	3	1.16	841 P	NC	NC	NC	NC
ze92d07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366445 3'	RC_AA026397_at	133 P	43 P	43 P	NC	NC	-1.6	-0.14	168 P	D	D	D	D
Human fetal brain cDNA 3'-end GEN-079C04:	RC_D59981_s_at	132 P	124 P	124 P	NC	NC	-1.1	0	99 P	NC	NC	NC	NC
zs47c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700820 3'	RC_AA284143_at	132 P	278 P	278 P	NC	NC	1.3	0.04	194 P	NC	NC	NC	NC
zb08112.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'	W16686_at	131 P	86 P	86 P	NC	NC	-1.2	-0.02	161 P	NC	NC	NC	NC
yw28c11.r1 Homo sapiens cDNA clone 253556 5'	H89575_s_at	129 P	233 P	233 P	NC	NC	1.8	0.24	351 P	I	I	I	I
zs07g11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684548 3'	RC_AA251003_at	128 P	104 P	104 P	NC	NC	-1.2	-0.03	88 P	NC	NC	NC	NC
zs84h09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704225 3'	RC_AA279408_at	126 P	166 P	166 P	NC	NC	1.3	0.05	113 P	NC	NC	NC	NC
z107g10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712482 3' similar to TR:G808826 G808826 HYPOTHETICAL 25.7 KD PROTEIN. ;	RC_AA281760_at	126 P	77 P	77 P	NC	NC	-1.6	-0.12	66 P	NC	NC	NC	NC
Human mRNA for KIAA0383 gene, partial cds.	AB002381_at	123 P	168 P	168 P	NC	NC	1.4	0.06	102 P	NC	NC	NC	NC
zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;	AA459542_s_at	123 P	174 P	174 P	NC	NC	-1.2	-0.02	247 P	NC	NC	NC	NC
z107b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'	RC_AA115559_at	121 P	106 P	106 P	NC	NC	-1.2	-0.01	91 P	NC	NC	NC	NC
ye36a05.r1 Homo sapiens cDNA clone 119792 5'	T94506_at	117 P	71 P	71 P	MD	MD	-2.2	-0.34	51 P	NC	NC	NC	NC
Human fetal brain cDNA 5'-end GEN-404F02.	D55869_s_at	115 P	145 P	145 P	NC	NC	1.3	0.03	79 P	NC	NC	NC	NC
Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds	L02547_at	115 P	106 P	106 P	NC	NC	-1.1	-0.01	99 P	NC	NC	NC	NC
Human syntaxin 7 mRNA, complete cds.	U77942_at	115 P	61 P	61 P	NC	NC	-1.9	-0.19	38 P	NC	NC	NC	NC

Fig. 7.32

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

236 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp

data sorted acc. To Avg Diff N

gene name	Fold Change T1gillP(vs)N	Sort Score T1gillP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A
zo13e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 586796 3'	9.5	8.67	2303 P	I			19.6	20.68	55 A	D		
yh25b11.r1 Homo sapiens cDNA clone 130749 5'	1.7	0.19	237 P	NC			1.7	0.21	17 A	D		
EST176117 Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end.	-1.3	-0.05	87 P	NC			-1.4	-0.05	-113 A	D		
zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'	1.2	0.02	275 P	NC			1.2	0.02	-8 A	D		
zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'	1.1	0.01	1005 P	NC			1.5	0.2	1093 A	D		
ze02d07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366445 3'	-1.4	-0.07	97 P	NC			-1.5	-0.08	10 A	D		
Human fetal brain cDNA 3'-end GEN-079C04.	-1.3	-0.05	89 P	NC			-1.5	-0.08	32 A	D		
zs47c07.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'	-1.1	-0.02	174 P	NC			-1.3	-0.04	-79 A	D		
zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'	1.5	0.1	82 P	NC			-1.2	-0.02	22 A	D		
yw26c11.r1 Homo sapiens cDNA clone 253556 5'	2.7	0.87	130 P	NC			1	0	44 A	D		
zs07g11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684548 3'	-1.5	-0.07	65 P	D			-2.1	-0.3	46 A	D		
zs84h09.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704225 3'	-1.1	-0.01	60 P	D			-2.1	-0.28	22 A	D		
zi07g10.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712482 3' similar to	-1.3	-0.04	46 P	D			-1.9	-0.18	-18 A	D		
TR:G608826 G608826 HYPOTHETICAL 25.7 KD PROTEIN. ;												
Human mRNA for KIAA0383 gene, partial cds.	-1	0	95 P	NC			-1.3	-0.04	38 A	D		
zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5'	~8.4	-2.72	6 P	NC			~4.9	-1.38	186 A	D		
similar to TR:G608025 G608025 ANKYRIN G. ;												
zi07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'	-1.3	-0.04	77 P	NC			-1.6	-0.1	34 A	D		
ye36a05.r1 Homo sapiens cDNA clone 119792 5'	-3.1	-0.74	148 P	NC			-1	0	115 A	D		
Human fetal brain cDNA 5'-end GEN-404F02.	-1.5	-0.07	71 P	D			-1.6	-0.11	40 A	D		
Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds	-1.4	-0.05	96 P	NC			-1.3	-0.04	32 A	D		
Human syntaxin 7 mRNA, complete cds.	-3.1	-0.63	73 P	NC			-1.6	-0.1	5 A	D		

Fig. 7.33

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

236 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	Δ	σ	Q
zo13e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 586796 3'	~2.9	-0.54	PPPPA	138	561	1137	2303
yh25b11.r1 Homo sapiens cDNA clone 130749 5'	~4.3	-1.26	PPPPA	137	99	232	237
EST175117 Colon carcinoma (Caco-2) cell line II Homo sapiens cDNA 5' end.	~4.7	-0.89	PPPPA	135	76	67	87
zk05c12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469654 3'	~3.0	-0.55	PPPPA	134	281	255	275
zk29e11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471980 5'	~4.1	-2.15	PPPPA	134	871	841	1005
ze92d07.s1 Soares fetal heart NbH119W Homo sapiens cDNA clone 366445 3'	~4.2	-1.18	PPPPA	133	43	168	97
Human fetal brain cDNA 3'-end GEN-079C04.	~3.0	-0.56	PPPPA	132	124	99	89
zs47c07.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700620 3'	~6.6	-2.15	PPPPA	132	278	194	174
zb08f12.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 301487 5'	~3.9	-1.03	PPPPA	131	86	161	82
yw28c11.r1 Homo sapiens cDNA clone 253556 5'	~2.9	-0.6	PPPPA	129	233	351	130
zs07g11.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684548 3'	~2.9	-0.59	PPPPA	128	104	88	65
zs84h09.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704225 3'	~3.5	-0.84	PPPPA	126	166	113	60
zi07g10.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712482 3' similar to TR:G808826 G808826 HYPOTHETICAL 25.7 KD PROTEIN. ;	~4.5	-1.17	PPPPA	126	77	66	46
Human mRNA for KIAA0383 gene, partial cds.	~2.9	-0.56	PPPPA	123	168	102	95
zx89d08.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810927 5' similar to TR:G608025 G608025 ANKYRIN G. ;	~5.3	-1.39	PPPPA	123	174	247	6
zi07b12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491615 3'	~3.1	-0.67	PPPPA	121	106	91	77
ye36a05.r1 Homo sapiens cDNA clone 119792 5'	~1.6	-0.13	PPPPA	117	71	51	148
Human fetal brain cDNA 5'-end GEN-404F02.	~2.8	-0.54	PPPPA	115	145	79	71
Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa subunit, complete cds	~3.2	-0.71	PPPPA	115	106	99	96
Human syntaxin 7 mRNA, complete cds.	~3.7	-0.82	PPPPA	115	61	38	73

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Fig. 7.34

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets Incl. AFFX, all NC, all A, 3xNC +M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED In all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A
zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 702140 5'.	AA431505_at	116 P	57 P	57 P	57 P	NC	NC	-1.7	-0.13	78 P	78 P	NC	NC
z38c08.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 665678 3'.	RC_AA194045_at	114 P	96 P	96 P	96 P	NC	NC	-1.2	-0.02	155 P	155 P	NC	NC
ze78f05.s1 Soares fetal heart NhlH19W Homo sapiens cDNA clone 365121 3'.	RC_AA025104_at	111 P	162 P	162 P	162 P	NC	NC	1.6	0.13	358 P	358 P	I	I
z36e09.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 668296 3'.	RC_AA242822_at	110 P	105 P	105 P	105 P	NC	NC	-1	0	104 P	104 P	NC	NC
z35f04.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'.	RC_AA287388_at	110 P	168 P	168 P	168 P	NC	NC	1.5	0.1	195 P	195 P	NC	NC
hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA247678_at	110 P	131 P	131 P	131 P	NC	NC	1.2	0.02	100 P	100 P	NC	NC
ab41e08.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 843398 3'.	RC_AA489383_at	108 P	45 P	45 P	45 P	MD	MD	-2.4	-0.35	41 P	41 P	NC	NC
zu81a08.s1 Soares testis NHT Homo sapiens cDNA clone 744374 3'.	RC_AA621188_at	108 P	68 P	68 P	68 P	NC	NC	-1.3	-0.04	281 P	281 P	NC	NC
ab35a01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842760 3'.	RC_AA486182_at	105 P	102 P	102 P	102 P	NC	NC	-1	0	291 P	291 P	I	I
zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758457 3'.	RC_AA393876_s_at	103 P	171 P	171 P	171 P	NC	NC	1.7	0.15	86 P	86 P	NC	NC
z106h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'.	RC_AA034189_at	100 P	85 P	85 P	85 P	NC	NC	-1.2	-0.02	44 P	44 P	NC	NC
ze79b09.s1 Soares fetal heart NhlH19W Homo sapiens cDNA clone 365177 3'.	RC_AA024866_at	99 P	56 P	56 P	56 P	MD	MD	-1.8	-0.14	39 P	39 P	D	D
zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'.	RC_AA450373_at	99 P	126 P	126 P	126 P	NC	NC	1.1	0	114 P	114 P	NC	NC
yz76d07.r1 Homo sapiens cDNA clone 289165 5'.	N78483_at	97 P	98 P	98 P	98 P	NC	NC	1.1	0	63 P	63 P	NC	NC
zs94d07.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705133 3'.	RC_AA281245_at	90 P	86 P	86 P	86 P	NC	NC	-1	0	63 P	63 P	NC	NC
zc45b12.r1 Soares senescent fibroblasts NhlHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN. [2] PIR:S07807 ;	W52431_at	79 P	42 P	42 P	42 P	NC	NC	-1.9	-0.16	437 P	437 P	I	I
zw84f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783673 3'.	RC_AA446597_at	66 P	64 P	64 P	64 P	NC	NC	-1.7	-0.09	57 P	57 P	D	D
zr81h11.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 682149 3'.	RC_AA256996_at	63 P	50 P	50 P	50 P	NC	NC	-1.5	-0.07	72 P	72 P	NC	NC
H.sapiens gene for cytochrome 20	X73501_at	51 P	219 P	219 P	219 P	I	I	3.7	1.18	505 P	505 P	I	I
z120g02.s1 Soares ovary tumor NhlHOT Homo sapiens cDNA clone 713714 3' similar to TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;	RC_AA287131_at	-160 P	266 P	266 P	266 P	NC	NC	-17.5	7.21	-229 P	-229 P	NC	NC

Fig. 7.35

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 236 genes LOST Abs calls PPPPA and DECREASED  
 8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp  
 data sorted acc. To Avg Diff N

gene name	Fold Change T1gillP(vs)N	Sort Score T1gillP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A
zw76c03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'	-1.5	-0.07	53 P	NC	NC		-1.8	-0.16	2 A	D		
zr38c08.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 665678 3'	-1.1	-0.01	100 P	NC	NC		-1.1	-0.01	14 A	D		
ze78f05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365121 3'	3.5	1.48	265 P	NC	NC		2.7	0.77	1 A	D		
zr65e09.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 668296 3'	-1.1	.0	52 P	D	D		-2.1	-0.26	40 A	D		
zs50f04.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'	1.5	0.11	108 P	NC	NC		-1	0	5 A	D		
hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'	-1.1	-0.01	34 P	NC	NC		-1.7	-0.13	-69 A	D		
ab41e08.s1 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone 843398 3'	-2.6	-0.45	109 P	NC	NC		1	0	19 A	D		
zu81a08.s1 Soares testis NHT Homo sapiens cDNA clone 744374 3'	2.6	0.7	86 P	NC	NC		-1	0	91 A	D		
ab35a01.s1 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone 842760 3'	2.3	0.48	255 P	I	I		2.4	0.57	51 A	D		
zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'	-1.2	-0.02	61 P	NC	NC		-1.7	-0.12	43 A	D		
zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'	-2.3	-0.3	14 P	NC	NC		-3.9	-0.86	-126 A	D		
ze79b09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365177 3'	-2.5	-0.39	62 P	NC	NC		-1.6	-0.09	-17 A	D		
zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'	-1.1	-0.01	98 P	NC	NC		-1	0	39 A	D		
yz78d07.r1 Homo sapiens cDNA clone 289165 5'	-1.5	-0.08	29 P	D	D		-3.0	-0.53	31 A	D		
zs94d07.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705133 3'	-1.4	-0.06	49 P	D	D		-1.9	-0.17	-1 A	D		
zc45b12.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5'	~21.6	10.27	2228 P	I	I		28.2	26.64	82 A	D		
similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN. [2] PIR:S07807												
zw84f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783673 3'	~3.3	-0.55	70 P	D	D		-1.5	-0.07	43 A	D		
zr81h11.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 682149 3'	-1.4	-0.06	88 P	NC	NC		-1.1	-0.01	43 A	D		
h1.sapiens gene for cytokeratin 20	9.3	5.91	991 P	I	I		18.6	13.95	14 A	D		
zi20g02.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713714 3' similar to	~4.4	-0.25	308 P	NC	NC		1.8	0.29	-343 A	D		
IR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE												

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Fig. 7.36

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

236 genes LOST Abs calls PPPPA and DECREASED

8 genes LOST Abs calls PPPPA and DECREASED in all 4 comp

data sorted acc. To Avg Diff N

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	Y	W	O	D
zw76e03.r1 Soares testis NHT Homo sapiens cDNA clone 782140 5'	~-3,7	-0,83	PPPPA	115	57	78	53	0
z38c08.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 665678 3'	-2,7	-0,61	PPPPA	114	95	155	100	0
ze78f05.s1 Soares fetal heart NhlH19W Homo sapiens cDNA clone 365121 3'	~-2,1	-0,21	PPPPA	111	162	358	265	0
z165e09.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 668296 3'	~-3,1	-0,63	PPPPA	110	105	104	52	0
zs50f04.s1 NCJ_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700927 3'	~-4,1	-0,9	PPPPA	110	168	195	108	0
hfe0045.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'	~-4,3	-1,03	PPPPA	110	131	100	34	0
ab41e08.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 843398 3'	~-3,2	-0,61	PPPPA	108	45	41	109	0
zu81a08.s1 Soares testis NHT Homo sapiens cDNA clone 744374 3'	-1,9	-0,24	PPPPA	108	68	281	86	0
ab35a01.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842760 3'	~-3,8	-0,84	PPPPA	105	102	291	255	0
zv64h10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758467 3'	~-3,8	-0,93	PPPPA	103	171	86	61	0
zi06h12.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430055 3'	~-7,0	-1,6	PPPPA	100	85	44	14	0
ze79b09.s1 Soares fetal heart NhlH19W Homo sapiens cDNA clone 365177 3'	~-3,5	-0,56	PPPPA	99	56	39	62	0
zx05h06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785627 3'	~-3,4	-0,58	PPPPA	99	126	114	98	0
yz78d07.r1 Homo sapiens cDNA clone 289165 5'	~-2,8	-0,46	PPPPA	97	98	63	29	0
zs94d07.s1 NCJ_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705133 3'	~-3,2	-0,53	PPPPA	90	86	63	49	0
zc45b12.r1 Soares senescent fibroblasts NhlHSF Homo sapiens cDNA clone 325247 5'	-1,4	-0,06	PPPPA	79	42	437	2228	0
similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN. [2] PIR:S07807 ;								
zw84f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 763673 3'	~-2,4	-0,27	PPPPA	66	64	57	70	0
zi81h11.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 682149 3'	~-3,2	-0,56	PPPPA	63	50	72	88	0
H.sapiens gene for cytokeratin 20	~-2,1	-0,13	PPPPA	51	219	505	991	0
zi20g02.s1 Soares ovary tumor NhlHOT Homo sapiens cDNA clone 713714 3' similar to	~-9,0	-0,81	PPPPA	-160	266	-229	308	0
TR:E124071 E124071 NAD+-ISOCITRATE DEHYDROGENASE ;								

Fig. 8.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 62 genes LOST Abs calls PPPAA and DECREASED  
 9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A	Fold Change T1glIP(vs)N
Human mRNA for KIAA0372 gene, complete cds.	AB002370_at	81 P	64 P	7 P	7 P	D	D	-1.8	-0.13	89 P	NC	NC	B=A	-1.5
Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.	AF000546_at	59 P	7 P	7 P	7 P	D	D	-4.2	-0.77	-8 P	MD	MD	~4.3	-1.4
yy70c03.r1 Homo sapiens cDNA clone 183268 5'.	H43922_at	162 P	114 P	415 P	186 P	NC	NC	-1.4	-0.07	117 P	NC	NC	~1.4	-1.1
yy17b05.r1 Homo sapiens cDNA clone 187665 5' similar to contains Alu repetitive element.	H44269_at	377 P	415 P	186 P	186 P	NC	NC	1.1	0.01	339 P	NC	NC	~1.1	-2
yy23a08.r1 Homo sapiens cDNA clone 253094 5'.	H88706_s_at	262 P	207 P	286 P	207 P	D	D	-3	-1.47	218 P	D	D	~2.9	-2.1
Homo sapiens epoxide hydrolase (EPHX) gene, complete cds	L25880_s_at	624 P	207 P	286 P	207 P	D	D	-1.2	-0.03	157 P	D	D	~1.4	-1.4
yy36a01.r1 Homo sapiens cDNA clone 254305 5'.	N81162_at	336 P	206 P	206 P	206 P	NC	NC	1.1	0.01	175 P	NC	NC	~7.8	-13.2
H. sapiens partial cDNA sequence; clone c-3ec07.	RC_F10381_s_at	217 P	297 P	591 P	591 P	NC	NC	-1.2	-0.03	180 P	NC	NC	~13.2	-3.3
EST000018 HE6W Homo sapiens cDNA clone HE6WCR108 3'.	RC_H54558_at	317 P	622 P	591 P	591 P	NC	NC	-1.1	-0.01	40 P	D	D	~1.9	1.2
yy20g08.s1 Homo sapiens cDNA clone 205886 3' similar to SP:FTDH_RAT P28037	RC_H56692_s_at	622 P	591 P	591 P	591 P	NC	NC	-1.1	-0.01	40 P	D	D	~1.6	-1.6
FORMYLtetrahydrofolate dehydrogenase														
yy28d05.s1 Homo sapiens cDNA clone 263051 3'.	RC_N20047_at	391 P	137 P	799 P	186 P	NC	NC	-2.8	-1.01	120 P	D	D	-3.3	-1.9
yy28e04.s1 Homo sapiens cDNA clone 244052 3'.	RC_N38810_at	1198 P	799 P	186 P	186 P	NC	NC	-1.5	-0.26	-78 P	NC	NC	~1.2	-1.6
yy61h01.s1 Homo sapiens cDNA clone 36305 3'.	RC_R45497_at	197 P	186 P	791 P	791 P	NC	NC	-1.1	0	251 P	NC	NC	-1.6	-1.6
yy76a08.s1 Homo sapiens cDNA clone 154646 3'.	RC_R55001_at	700 P	791 P	1158 P	1158 P	NC	NC	1.1	0.03	596 P	NC	NC	-1.6	-1.6
EST110130 Homo sapiens cDNA 3' end similar to None.	RC_T29986_s_at	1498 P	1158 P	353 P	353 P	NC	NC	-1.5	-0.31	1153 P	D	D	-1.4	-2.2
EST112901 Homo sapiens cDNA 3' end similar to None.	RC_T30214_at	359 P	353 P	158 P	158 P	NC	NC	-1.5	-0.15	381 P	NC	NC	-2.8	-2.7
yya01c07.s2 Homo sapiens cDNA clone 60204 3'.	RC_T40438_at	314 P	379 P	275 P	275 P	NC	NC	-1.6	-0.17	93 P	D	D	-5	-4.7
zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.	RC_W51910_at	690 P	379 P	275 P	275 P	D	D	-2.4	-0.89	331 P	D	D	-2.1	-2.1
zd71f09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 346121 3'.	RC_W73949_at	660 P	275 P	375 P	375 P	MD	MD	-2.4	-0.9	200 P	NC	NC	-2.7	-5
zh55a02.s1 Soares fetal liver spleen 1NFS S1 Homo sapiens cDNA clone 415946 3'.	RC_W86375_s_at	2209 P	375 P	423 P	423 P	D	D	-7.6	-10.36	563 P	D	D	-4.7	-2.1
H. sapiens partial cDNA sequence; clone c-05e04.	RC_Z38289_at	1217 P	423 P	103 P	103 P	D	D	-2.5	-1.26	227 P	D	D	-2.1	-2.1
H. sapiens partial cDNA sequence; clone c-0qb04.	RC_Z38807_s_at	201 P	103 P	103 P	103 P	D	D	-1.9	-0.28	97 P	MD	MD	-2.1	-2.1

Fig. 8.2

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

52 genes LOST Abs calls PPPAA and DECREASED

9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Sort Score T1gllp(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	Diff Call T2gllmixP(vs)N	Fold Change T2gllmixP(vs)N	Sort Score T2gllmixP(vs)N	Avg Diff T2gllsolidP	Abs Call T2gllsolidP	Diff Call T2gllsolidP(vs)N	B=A
Human mRNA for KIAA0372 gene, complete cds.	-0,07	32 A	D	D	-3,2	-0,55	34 A	D	D	B=A
Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.	-0,74	-35 A	D	D	-4,1	-0,58	3 A	D	D	
yo70c03.r1 Homo sapiens cDNA clone 183268 5'.	-0,06	76 A	D	D	-2,1	-0,32	61 A	D	D	
yp17b05.r1 Homo sapiens cDNA clone 187665 5' similar to contains Alu repetitive element.	0,01	444 A	D	D	1	0	49 A	D	D	
yy23e08.r1 Homo sapiens cDNA clone 253094 5'.	-0,33	108 A	D	D	-2,4	-0,57	24 A	D	D	
Homo sapiens epoxide hydrolase (EPHX) gene, complete cds	-1,32	178 A	D	D	-3,5	-1,96	318 A	D	D	
yy36d01.r1 Homo sapiens cDNA clone 254305 5'.	-0,48	143 A	D	D	-2,3	-0,6	109 A	D	D	
H. sapiens partial cDNA sequence; clone c-3ec07.	-0,08	73 A	D	D	-3	-0,88	98 A	D	D	
EST00018 HE6W Homo sapiens cDNA clone HE6WCR108 3'.	-4,24	58 A	D	D	-8,3	-4,52	52 A	D	D	
yy20g08.s1 Homo sapiens cDNA clone 205886 3' similar to SP:FTDH_RAT P28037	-8,99	-149 A	D	D	-13,7	-9,7	-103 A	D	D	
FORMYL TETRAHYDROFOLATE DEHYDROGENASE ;										
yx28d06.s1 Homo sapiens cDNA clone 263051 3'.	-1,33	35 A	D	D	-6,9	-3,93	207 A	D	D	
yy28e04.s1 Homo sapiens cDNA clone 244062 3'.	-0,59	100 A	D	D	-1,8	-0,68	900 A	D	D	
yg51h01.s1 Homo sapiens cDNA clone 36305 3'.	0,02	86 A	D	D	-2,5	-0,57	107 A	D	D	
yj76a08.s1 Homo sapiens cDNA clone 154646 3'.	-0,23	350 A	D	D	-3,2	-1,67	133 A	D	D	
EST10130 Homo sapiens cDNA 3' end similar to None.	-0,39	716 A	D	D	-2,7	-1,77	806 A	D	D	
EST12901 Homo sapiens cDNA 3' end similar to None.	-0,1	195 A	D	D	-2,6	-0,99	32 A	D	D	
ya01c07.s2 Homo sapiens cDNA clone 60204 3'.	-0,41	96 A	D	D	-2,7	-0,73	134 A	D	D	
zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.	-1,29	375 A	D	D	-2,4	-0,88	268 A	D	D	
zd71f09.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 346121 3'.	-1,11	133 A	D	D	-5,2	-3,72	-28 A	D	D	
zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.	-6,3	86 A	D	D	-26,9	-22,82	186 A	D	D	
H. sapiens partial cDNA sequence; clone c-05e04.	-3,96	145 A	D	D	-7,3	-6,96	-170 A	D	D	
H. sapiens partial cDNA sequence; clone c-0qb04.	-0,34	45 A	D	D	-3,6	-1,09	84 A	D	D	



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Fig. 8.3

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

52 genes LOST Abs calls PPPAA and DECREASED

9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Fold Change TzgilisolidP(vs)N	Sort Score TzgilisolidP(vs)N	Abs Calls	N	A	B	C	D
Human mRNA for KIAA0372 gene, complete cds.	~2,5	-0,3 PPPAA	81	64	89	0	0	0
Homo sapiens purinergic receptor P2Y5 mRNA, complete cds.	~3,2	-0,54 PPPAA	59	7	-8	0	0	0
yo70c03.r1 Homo sapiens cDNA clone 183268 5'.	-2,6	-0,55 PPPAA	162	114	117	0	0	0
yp17b05.r1 Homo sapiens cDNA clone 187665 5' similar to contains Alu repetitive element.	-4,5	-1,7 PPPAA	377	415	339	0	0	0
yo23e08.r1 Homo sapiens cDNA clone 253094 5'.	~5,7	-2,31 PPPAA	262	186	133	0	0	0
Homo sapiens epoxide hydrolase (EPHX) gene, complete cds	-2	-0,52 PPPAA	624	207	218	0	0	0
yo36d01.r1 Homo sapiens cDNA clone 254305 5'.	-3,2	-1,24 PPPAA	336	286	157	0	0	0
H. sapiens partial cDNA sequence; clone c-3ec07.	-2,3	-0,45 PPPAA	217	206	175	0	0	0
EST00018 HE6W Homo sapiens cDNA clone HE6WCR108 3'.	~11,3	-6,04 PPPAA	317	297	180	0	0	0
yr20g08.s1 Homo sapiens cDNA clone 205886 3' similar to SP:FTDH_RAT P28037	~12,1	-8,78 PPPAA	622	591	40	0	0	0
FORMYL TETRAHYDROFOLATE DEHYDROGENASE ;								
ya28d08.s1 Homo sapiens cDNA clone 263051 3'.	-1,6	-0,19 PPPAA	391	137	120	0	0	0
yo28e04.s1 Homo sapiens cDNA clone 244062 3'.	-8,9	-8,97 PPPAA	1198	799	-78	0	0	0
yo51h01.s1 Homo sapiens cDNA clone 36305 3'.	-2	-0,33 PPPAA	197	186	251	0	0	0
yl76a08.s1 Homo sapiens cDNA clone 154646 3'.	~9,0	-6,51 PPPAA	700	791	596	0	0	0
EST10130 Homo sapiens cDNA 3' end similar to None.	-1,9	-0,66 PPPAA	1498	1158	1153	0	0	0
EST12901 Homo sapiens cDNA 3' end similar to None.	~7,3	-4,24 PPPAA	359	353	381	0	0	0
ya01c07.s2 Homo sapiens cDNA clone 60204 3'.	-1,9	-0,31 PPPAA	314	158	93	0	0	0
zc37f06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 324515 3'.	-3,5	-2 PPPAA	690	379	331	0	0	0
zd71f09.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 346121 3'.	~10,8	-8,09 PPPAA	660	275	200	0	0	0
zh55a02.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415946 3'.	-13,9	-17,47 PPPAA	2209	375	563	0	0	0
H. sapiens partial cDNA sequence; clone c-05e04.	~18,6	-15,52 PPPAA	1217	423	227	0	0	0
H. sapiens partial cDNA sequence; clone c-0qb04.	-2,4	-0,49 PPPAA	201	103	97	0	0	0

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Fig. 8.4

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

52 genes LOST Abs calls PPPAA and DECREASED

9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs)N	B=A	Fold Change TaglIP (vs)N	Sort Score TaglIP (vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP (vs)N	B=A	Fold Change T1glIP (vs)N
H. sapiens partial cDNA sequence; clone c-1ed10.	RC_Z39599_at	312 P	185 P	85 P	NC	NC		-1.7	-0.21	201 P	NC	NC		-1.6
ze74h03.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 364757 3' similar to contains OFR.t1 OFR repetitive element ;	RC_AA025351_at	121 P	85 P	85 P	NC	NC		-1.8	-0.15	109 P	NC	NC		-1.4
z101f04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491071 3'.	RC_AA136474_at	155 P	67 P	67 P	NC	NC		-2.3	-0.39	63 P	NC	NC		-2.5
z49b02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490923 3'.	RC_AA136611_at	88 P	76 P	76 P	NC	NC		-1.2	-0.01	31 P	D	D		-2.9
z48f07.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 666661 3'.	RC_AA233375_at	282 P	104 P	104 P	D	D		-2.4	-0.52	228 P	NC	NC		-1.3
z136c05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724424 3'.	RC_AA235621_s_at	417 P	220 P	220 P	NC	NC		-1.9	-0.37	176 P	D	D		-2.4
z77g02.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 668978 3'.	RC_AA253331_at	167 P	160 P	160 P	NC	NC		-1	0	166 P	NC	NC		-1
z64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758394 3'.	RC_AA393793_at	126 P	71 P	71 P	D	D		-1.8	-0.16	49 P	D	D		-2.6
z04a05.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 752624 3'.	RC_AA419547_at	155 P	102 P	102 P	NC	NC		-1.5	-0.1	58 P	D	D		-2.9
z027d11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739221 3'.	RC_AA421100_at	630 P	495 P	495 P	NC	NC		-1.3	-0.07	252 P	D	D		-2.1
z087f06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 763971 3'.	RC_AA443277_at	115 P	63 P	63 P	NC	NC		-2.1	-0.26	89 P	NC	NC		-1.3
z084c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.	RC_AA446570_at	131 P	50 P	50 P	D	D		-2.6	-0.5	66 P	D	D		-2
z093c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784512 3'.	RC_AA447123_at	189 P	160 P	160 P	NC	NC		-1.3	-0.04	55 P	D	D		-3.4
z05g09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785728 3'.	RC_AA449343_at	102 P	111 P	111 P	NC	NC		1.1	0.01	72 P	MD	MD		-2.8
aa03a08.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 812150 3'.	RC_AA456016_at	99 P	29 P	29 P	D	D		-3.5	-0.75	22 P	D	D		-4.6
z021f04.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 754303 3'.	RC_AA479299_at	215 P	402 P	402 P	I	I		2.2	0.6	109 P	D	D		-2
z017d09.s1 Soares NbHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ;	RC_AA479350_at	258 P	84 P	84 P	MD	MD		-2.7	-0.68	69 P	MD	MD		-3.3

Fig. 8.5

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 52 genes LOST Abs calls PPPAA and DECREASED  
 9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A
Hi. sapiens partial cDNA sequence; clone c-1ed10.	-0.15	33 A	D			-5.6	-2.73	151 A	D			-5.6	-2.73	151 A	D		
ze74h03.s1 Soares fetal heart NbH119W Homo sapiens cDNA clone 364757 3' similar to contains OFR.t1 OFR repetitive element ;	-0.06	-19 A	D			-5.9	-1.73	25 A	D			-5.9	-1.73	25 A	D		
z101f04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491071 3'.	-0.46	39 A	D			-4.5	-1.55	37 A	D			-4.5	-1.55	37 A	D		
zk99b02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490923 3'.	-0.49	17 A	D			-3.5	-0.68	30 A	D			-3.5	-0.68	30 A	D		
z148f07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666661 3'.	-0.07	89 A	D			-3.4	-1.25	106 A	D			-3.4	-1.25	106 A	D		
z136c05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724424 3'.	-0.69	122 A	D			-3.4	-1.49	40 A	D			-3.4	-1.49	40 A	D		
z172g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668978 3'.	0	7 A	D			-5.6	-1.73	26 A	D			-5.6	-1.73	26 A	D		
z164a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 756224 3'.	-0.46	58 A	D			-2.2	-0.3	26 A	D			-2.2	-0.3	26 A	D		
z104a05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752624 3'.	-0.7	33 A	D			-5.1	-1.79	39 A	D			-5.1	-1.79	39 A	D		
z127d11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739221 3'.	-0.54	245 A	D			-2.1	-0.59	-82 A	D			-2.1	-0.59	-82 A	D		
z187f06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783971 3'.	-0.04	21 A	D			-3.8	-0.9	18 A	D			-3.8	-0.9	18 A	D		
z184c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.	-0.24	44 A	D			-3	-0.65	43 A	D			-3	-0.65	43 A	D		
z193c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784512 3'.	-1.01	74 A	D			-2.5	-0.55	78 A	D			-2.5	-0.55	78 A	D		
z105g09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785728 3'.	-0.67	40 A	D			-5	-1.87	263 A	D			-5	-1.87	263 A	D		
aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.	-1.18	30 A	D			-3.3	-0.67	40 A	D			-3.3	-0.67	40 A	D		
z121f04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754303 3'.	-0.31	48 A	D			-4.5	-1.67	8 A	D			-4.5	-1.67	8 A	D		
z17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ;	-1.02	20 A	D			-9.1	-4.29	42 A	D			-9.1	-4.29	42 A	D		

Fig. 8.6

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

52 genes LOST Abs calls PPPAA and DECREASED

9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	Z	W	U	D
H. sapiens partial cDNA sequence; clone c-1ed10.	-2.1	-0.41 PPPAA	312	185	201	0	0
ze74h03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364757 3' similar to contains OFR.11 OFR repetitive element ;	-3.9	-1.03 PPPAA	121	85	109	0	0
zl01f04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491071 3'.	-3.9	-1.12 PPPAA	155	67	63	0	0
zk99b02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490923 3'.	-2.4	-0.32 PPPAA	88	76	31	0	0
zk48f07.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 666661 3'.	-2.7	-0.75 PPPAA	282	104	228	0	0
zl36c05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 724424 3'.	-10.2	-5.99 PPPAA	417	220	176	0	0
zl72g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 668978 3'.	-4.1	-1.05 PPPAA	167	160	166	0	0
zv64a10.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 758394 3'.	-3.3	-0.73 PPPAA	126	71	49	0	0
zv04a05.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752624 3'.	-3.8	-1.11 PPPAA	156	102	58	0	0
zu27d11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 739221 3'.	-15.8	-9.78 PPPAA	630	495	252	0	0
zw87f06.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783971 3'.	-3.4	-0.72 PPPAA	115	63	89	0	0
zw84c05.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 3'.	-2.9	-0.59 PPPAA	131	50	66	0	0
zw93c01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784512 3'.	-2.4	-0.49 PPPAA	189	150	55	0	0
zx06g09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785728 3'.	-5.3	-2.01 PPPAA	102	111	72	0	0
aa03a08.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 812150 3'.	-2.4	-0.36 PPPAA	99	29	22	0	0
zv21f04.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 754303 3'.	-6.1	-2.49 PPPAA	215	402	109	0	0
zv17d09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753905 3' similar to contains element TAR1 TAR1 repetitive element ;	-7.2	-3.59 PPPAA	258	84	69	0	0

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Fig. 8.7

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 52 genes LOST Abs calls PPPAA and DECREASED  
 9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A	Fold Change T1glIP(vs)N
Human leukemogenic homolog protein (MEIS1) mRNA, complete cds	U85707_at	91	D	90	P	NC		-1,2	-0,02	64	P	NC		-1,7
Human multisplicing membrane protein mRNA, complete cds. /gb=U94831 /ntype=RNA	U94831_at	206	P	253	P	NC		1,2	0,04	380	P	NC		-1,3
38c8 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	W27827_at	382	P	167	P	NC		-2,3	-0,6	243	P	MD		-1,6
zid5a12.r1 Soares fetal heart NBHH19W Homo sapiens cDNA clone 347422 5'.	W81301_at	575	P	584	P	NC		1	0	86	P	D		-6,3
H.sapiens mRNA for putative progesterone binding protein	Y12711_at	551	P	486	P	NC		-1,1	-0,02	673	P	NC		1,2
zm15c08.r1 Stralagene pancreas (#937208) Homo sapiens cDNA clone 525710 5'.	AA074407_at	67	P	59	P	NC		-1,3	-0,04	44	P	NC		-1,8
YY1646.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA091017_at	308	P	234	P	NC		1,1	0,01	447	P	NC		1,5
17134.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA104023_at	328	P	326	P	NC		-1	0	201	P	NC		-1,6
zo95d05.r1 Stralagene ovarian cancer (#937219) Homo sapiens cDNA clone 594633 5'.	AA171913_at	398	P	442	P	NC		1,5	0,14	310	P	NC		1
zr32h05.r1 Soares NHMIPu S1 Homo sapiens cDNA clone 665148 5'.	AA195678_at	95	P	88	P	NC		-1,1	-0,01	100	P	NC		-1,1
zr55e05.r1 Soares NHMIPu S1 Homo sapiens cDNA clone 667328 5'.	AA227678_at	268	P	125	P	D		-1,9	-0,26	88	P	D		-2,1
csg0306.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA247204_at	232	P	431	P	NC		-1,3	-0,05	400	P	NC		-1,4
zv18b05.r1 Soares NHMIPu S1 Homo sapiens cDNA clone 753969 5'.	AA479995_at	302	P	242	P	NC		-1,2	-0,04	185	P	NC		-1,9

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Fig. 8.8

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 52 genes LOST Abs calls PPPAA and DECREASED  
 9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Sort Score T1g1lP(vs)N	Avg Diff T2g1lmiXP	Abs Call T2g1lmiXP	Diff Call T2g1lmiXP(vs)N	B=A	Fold Change T2g1lmiXP(vs)N	Sort Score T2g1lmiXP(vs)N	Avg Diff T2g1lmiXP	Abs Call T2g1lmiXP	Diff Call T2g1lmiXP(vs)N	B=A
Human leukemogenic homolog protein (MEIS1) mRNA, complete cds	-0,12	25 A	D	~3,7	-0,85	-6 A	D	D	D	D	D
Human multisplicing membrane protein mRNA, complete cds. /gb=U94831 /ntype=RNA	-0,05	246 A	D	-2,4	-0,59	305 A	D	D	D	D	D
38c8 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA	-0,18	123 A	D	-3,1	-1,19	30 A	D	D	D	D	D
zd85a12.r1 Soares fetal heart NBH19W Homo sapiens cDNA clone 347422 5'	-4,17	-2 A	D	~19,2	-10,94	381 A	D	D	D	D	D
h.sapiens mRNA for putative progesterone binding protein	0,06	180 A	D	-3,1	-1,39	-19 A	D	D	D	D	D
zm15c08.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 525710 5'	-0,14	-6 A	D	~3,9	-0,71	-129 A	D	D	D	D	D
yy1646.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'	0,13	32 A	D	-6,9	-2,93	338 A	D	D	D	D	D
l7134.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'	-0,19	71 A	D	-4,6	-2,17	65 A	D	D	D	D	D
zo95d05.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594633 5'	0	-12 A	D	~14,2	-7,01	-51 A	D	D	D	D	D
zr32h05.r1 Soares NIHMPu S1 Homo sapiens cDNA clone 665145 5'	0	35 A	D	~3,4	-0,7	41 A	D	D	D	D	D
zr55e05.r1 Soares NIHMPu S1 Homo sapiens cDNA clone 667328 5'	-0,37	61 A	D	-3,5	-1,11	92 A	D	D	D	D	D
csg0306.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'	-0,07	337 A	D	-2,2	-0,4	134 A	D	D	D	D	D
zv18b05.r1 Soares NIHMPu S1 Homo sapiens cDNA clone 753969 5'	-0,37	27 A	D	~10,1	-5,07	19 A	D	D	D	D	D

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Fig. 8.9

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

52 genes LOST Abs calls PPPAA and DECREASED

9 genes LOST Abs calls PPPAA and DECREASED in all 4 comp

gene name	Fold Change T2gillsolidP(vs)N	Sort Score T2gillsolidP(vs)N	Abs Calls	N	A	B	C	D
Human leukemogenic homolog protein (MEIS1) mRNA, complete cds	~3.7	-0.78	PPPAA	91	90	64	0	0
Human multispanning membrane protein mRNA, complete cds. /gb=U94831 /ntype=RNA	-2.5	-0.64	PPPAA	206	253	380	0	0
38c8 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	~9.6	-5.45	PPPAA	382	167	243	0	0
zd85a12.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347422 5'.	-1.7	-0.35	PPPAA	575	584	86	0	0
H.sapiens mRNA for putative progesterone binding protein	~14.9	-9.41	PPPAA	551	486	673	0	0
zm15c08.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 525710 5'.	~6.0	-1	PPPAA	67	59	44	0	0
WY1646.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	1.1	0.01	PPPAA	308	234	447	0	0
l7134.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	-6	-3.34	PPPAA	328	326	201	0	0
zo95d05.r1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594633 5'.	~11.8	-6.01	PPPAA	398	442	310	0	0
zr32h05.r1 Soares NhtIMPu S1 Homo sapiens cDNA clone 665145 5'.	~2.8	-0.46	PPPAA	95	88	100	0	0
zr55e05.r1 Soares NhtIMPu S1 Homo sapiens cDNA clone 667328 5'.	-2.9	-0.84	PPPAA	258	125	88	0	0
cs90306.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	~6.2	-1.75	PPPAA	232	431	400	0	0
zv18b05.r1 Soares NhtIMPu S1 Homo sapiens cDNA clone 753969 5'.	~7.3	-3.52	PPPAA	302	242	185	0	0

Fig. 9.1

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

42 genes LOST Abs calls PAAA and DECREASED

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A
Human mRNA for KIAA0347 gene, complete cds.	AB002345_at	93 P	24 P	24 P	D	-4,4	-1,13	2 A	D	D	B=A
Homo sapiens breast cancer suppressor candidate 1 (brco-1) mRNA, complete cds.	AF002672_at	98 P	-7 P	-7 P	NC	-7,5	-2,13	-232 A	D	D	
Human liver arylamine N-acetyltransferase (EC 2.3.1.5) gene	D90041_s_at	160 P	98 P	98 P	NC	-1,6	-0,13	39 A	D	D	
yw37b04.r1 Homo sapiens cDNA clone 254383 5'.	N75611_s_at	230 P	25 P	25 P	D	-7,1	-2,74	8 A	D	D	
yq22h05.r1 Homo sapiens cDNA clone 199451 5'.	R97361_at	238 P	179 P	179 P	NC	-1,3	-0,06	93 A	D	D	
H. sapiens partial cDNA sequence; clone c-3cg10.	RC_F10282_at	433 P	719 P	719 P	NC	1,1	0,02	201 A	D	D	
yn64a05.s1 Homo sapiens cDNA clone 173170 3'.	RC_H20769_at	1411 P	742 P	742 P	D	-1,9	-0,68	535 A	D	D	
yy46c12.s1 Homo sapiens cDNA clone 276598 3' similar to contains L1.1 L1 repetitive element ;.	RC_N34871_at	628 P	426 P	426 P	NC	-1,1	-0,02	-149 A	D	D	
za11a07.s1 Homo sapiens cDNA clone 292212 3'.	RC_N66159_at	980 P	381 P	381 P	MD	-2,6	-1,28	72 A	D	D	
yf35b02.s1 Homo sapiens cDNA clone 128811 3'.	RC_R10075_at	154 P	112 P	112 P	NC	-1,4	-0,06	19 A	D	D	
y987f06.s1 Homo sapiens cDNA clone 40364 3'.	RC_R54822_at	212 P	44 P	44 P	D	-4,5	-1,68	26 A	D	D	
zd69b03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 356621 3'.	RC_W84413_at	247 P	868 P	868 P	NC	2,9	1,48	46 A	D	D	
zk19f06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 471011 3'.	RC_AA032250_at	182 P	101 P	101 P	NC	-1,4	-0,07	15 A	D	D	
zf13f05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 376833 3'.	RC_AA047616_at	124 P	72 P	72 P	NC	-1,4	-0,06	36 A	D	D	
zf50a03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380332 3'.	RC_AA047864_at	63 P	59 P	59 P	NC	-1,4	-0,04	17 A	D	D	
zi67a01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509688 3' similar to TR:G189087 G189087 NONSPECIFIC CROSSREACTING ANTIGEN. ;.	RC_AA058357_s_at	389 P	224 P	224 P	D	-2,2	-0,65	58 A	D	D	
zn53a05.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561872 3' similar to contains Alu repetitive element.	RC_AA066487_at	181 P	52 P	52 P	D	-4,3	-1,6	-3 A	D	D	
zi15b11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 501981 3'.	RC_AA128561_at	259 P	303 P	303 P	NC	1,4	0,09	-37 A	D	D	
zo71b05.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 592307 3'.	RC_AA146619_at	1174 P	1195 P	1195 P	NC	1	0	257 A	D	D	
zo78e05.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 593024 3'.	RC_AA159355_at	338 P	534 P	534 P	NC	1,4	0,1	52 A	D	D	
zs16f08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685383 3'.	RC_AA243582_at	195 P	64 P	64 P	D	-3,1	-0,82	-15 A	D	D	
zs91h04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704887 3'.	RC_AA283066_at	142 P	76 P	76 P	MD	-1,9	-0,2	32 A	D	D	
zw50d12.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773495 3'.	RC_AA427924_at	218 P	140 P	140 P	NC	-1,6	-0,13	93 A	D	D	
zv53d04.s1 Soares testis NHT Homo sapiens cDNA clone 757351 3'.	RC_AA437118_at	176 P	59 P	59 P	MD	-3,7	-1,22	33 A	D	D	



Fig. 9.2

EST Bladder candidates of 17742 EST's  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 42 genes LOST Abs calls PPAAs and DECREASED

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N
Human mRNA for KIAA0347 gene, complete cds.	~6,1	-1,76	-18 A	D	~5,1		~5,1	-1,31	-12 A	D	Diff Call T2glllmiXP(vs)N
Human sapiens breast cancer suppressor candidate 1 (bosc-1) mRNA, complete cds.	~17,3	-4,68	-210 A	D	~11,2		~11,2	-2,87	-161 A	D	Abs Call T2glllmiXP
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-4,1	-1,25	60 A	D	-2,7		-2,7	-0,55	98 A	D	Diff Call T2glllmiXP(vs)N
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~10,9	-4,5	22 A	D	~7,2		~7,2	-3,01	48 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-2,6	-0,62	64 A	D	-3,7		-3,7	-1,31	104 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-2,2	-0,55	7 A	D	-8,0		-8,0	-4,9	82 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-2,6	-1,63	572 A	D	-2,5		-2,5	-1,4	545 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~16,7	-11,72	-212 A	D	~12,6		~12,6	-9,03	139 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-13,6	-11,56	19 A	D	~16,8		~16,8	-13,47	86 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~3,8	-1,04	47 A	D	~2,8		~2,8	-0,57	41 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~6,1	-2,41	-19 A	D	~4,8		~4,8	-1,72	58 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~5,2	-2,21	58 A	D	~5,8		~5,8	-3,05	-37 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~5,1	-1,33	97 A	D	~1,9		~1,9	-0,25	58 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-3,5	-0,86	28 A	D	~3,6		~3,6	-0,77	-13 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~3,8	-0,75	38 A	D	~2,5		~2,5	-0,34	-67 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~11,7	-7,49	-13 A	D	~10,1		~10,1	-6,68	10 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~5,7	-2,33	-8 A	D	~4,8		~4,8	-1,79	62 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~7,2	-3,32	-36 A	D	~5,4		~5,4	-2,52	-14 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-4,7	-4,3	974 A	D	-1,6		-1,6	-0,41	1912 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-6,7	-3,65	-1 A	D	~6,8		~6,8	-3,46	-40 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	~11,4	-4,56	-38 A	D	~8,7		~8,7	-3,57	-58 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-4,4	-1,34	25 A	D	~4,9		~4,9	-1,52	22 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-2,3	-0,49	-3 A	D	~6,4		~6,4	-2,3	27 A	D	
Human liver aniline N-acetyltransferase (EC 2.3.1.5) gene	-3,5	-0,83	58 A	D	~3		~3	-0,76	-62 A	D	

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Fig. 9.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 42 genes LOST Abs calls PPAAA and DECREASED

gene name	B=A	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	Δ	Δ	Δ	Δ
Human mRNA for KIAA0347 gene, complete cds.	~-3.9	-0.82	PPAAA	93	24	0	0	0	0
Homo sapiens breast cancer suppressor candidate 1 (bcsc-1) mRNA, complete cds.	~-8.3	-1.89	PPAAA	98	-7	0	0	0	0
Human liver arylamine N-acetyltransferase (EC 2.3.1.5) gene	-3.9	-1.2	PPAAA	160	98	0	0	0	0
yo37b04.r1 Homo sapiens cDNA clone 254383 5'.	-4.5	-1.67	PPAAA	230	25	0	0	0	0
yq52h06.r1 Homo sapiens cDNA clone 199451 5'.	-2.3	-0.47	PPAAA	238	179	0	0	0	0
H. sapiens partial cDNA sequence; clone c-3cg10.	-6.3	-3.02	PPAAA	433	719	0	0	0	0
yn64a06.s1 Homo sapiens cDNA clone 173170 3'.	-2.6	-1.56	PPAAA	1411	742	0	0	0	0
yy46c12.s1 Homo sapiens cDNA clone 276598 3' similar to contains L1.t1 L1 repetitive element ;.	~-10.4	-7.61	PPAAA	628	426	0	0	0	0
za11a07.s1 Homo sapiens cDNA clone 292212 3'.	~-18.3	-15.52	PPAAA	980	381	0	0	0	0
yf35b02.s1 Homo sapiens cDNA clone 128811 3'.	~-2.6	-0.48	PPAAA	154	112	0	0	0	0
yg87f06.s1 Homo sapiens cDNA clone 40364 3'.	~-4.5	-1.6	PPAAA	212	44	0	0	0	0
zo89b03.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 356621 3'.	~-6.4	-2.63	PPAAA	247	868	0	0	0	0
zk19f06.s1 Soares pregnant uterus NbH19W Homo sapiens cDNA clone 471011 3'.	-1.7	-0.15	PPAAA	182	101	0	0	0	0
zf13f05.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 376833 3'.	~-4.3	-1.06	PPAAA	124	72	0	0	0	0
zf50a03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380332 3'.	~-4.6	-0.59	PPAAA	63	59	0	0	0	0
zif67e01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509688 3' similar to TR:G189087 G189087 NONSPECIFIC CROSSREACTING ANTIGEN. ;.	~-8.4	-5.59	PPAAA	389	224	0	0	0	0
zn53a05.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 551872 3' similar to contains Alu repetitive element ;.	~-3.3	-1.02	PPAAA	181	52	0	0	0	0
zif15b11.s1 Soares pregnant uterus NbH19W Homo sapiens cDNA clone 501981 3'.	~-4.9	-1.99	PPAAA	259	303	0	0	0	0
zo71b06.s1 Siralagene pancreas (#937208) Homo sapiens cDNA clone 592307 3'.	1.2	0.09	PPAAA	1174	1195	0	0	0	0
zo78a05.s1 Siralagene pancreas (#937208) Homo sapiens cDNA clone 593024 3'.	~-6.6	-3.41	PPAAA	338	534	0	0	0	0
zs16f08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685383 3'.	~-7.2	-2.82	PPAAA	195	64	0	0	0	0
zs91h04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704887 3'.	~-3.9	-1.06	PPAAA	142	76	0	0	0	0
zw50d12.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773495 3'.	~-4.9	-1.56	PPAAA	218	140	0	0	0	0
zv53d04.s1 Soares testis NHT Homo sapiens cDNA clone 757351 3'.	~-5.3	-1.34	PPAAA	176	59	0	0	0	0

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Fig. 9.4

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

42 genes LOST Abs calls PPAAA and DECREASED

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A
aa13e06.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 813154 3'	RC_AA456289_at	610 P	219 P	219 P	D	D	D	-2.8	-1.21	112 A	D	D	D
aa11f10.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 812971 3'	RC_AA464603_at	138 P	65 P	65 P	D	D	D	-2.1	-0.29	13 A	D	D	D
zv14d09.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 753617 3'	RC_AA478726_at	147 P	109 P	109 P	MD	MD	D	-2.4	-0.41	135 A	D	D	D
zv14g12.s1 Soares NhlHMPu S1 Homo sapiens cDNA clone 753670 3'	RC_AA478740_at	7 P	0 P	0 P	NC	NC	D	-3.7	-0.49	-165 A	D	D	D
zv45a05.s1 Soares ovary tumor NhlHMPu S1 Homo sapiens cDNA clone 756560 3'	RC_AA481440_at	471 P	334 P	334 P	NC	NC	D	-1.4	-0.12	94 A	D	D	D
af14g11.s1 Soares testis NHT Homo sapiens cDNA clone 1031684 3'	RC_AA608539_at	48 P	24 P	24 P	D	D	D	-2.5	-0.27	-8 A	D	D	D
af14h01.s1 Soares testis NHT Homo sapiens cDNA clone 1031665 3'	RC_AA608540_at	149 P	52 P	52 P	NC	NC	D	-2.9	-0.63	35 A	D	D	D
ae60g06.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 951322 3'	RC_AA620587_at	174 P	84 P	84 P	NC	NC	D	-1.6	-0.12	78 A	D	D	D
zc27a04.r1 Soares senescent fibroblasts NhlHMPu S1 Homo sapiens cDNA clone 323502 5'	W44317_at	90 P	56 P	56 P	NC	NC	D	-1.6	-0.1	-4 A	D	D	D
H.sapiens mRNA for acylphosphatase, muscle type (MT) isoenzyme	X64195_at	79 P	69 P	69 P	NC	NC	D	-1.1	-0.01	0 A	D	D	D
zp78h07.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626365 5'	AA188921_at	341 P	238 P	238 P	NC	NC	D	-1.4	-0.12	-9 A	D	D	D
EST47122 Fetal kidney II Homo sapiens cDNA 5' end.	AA341723_at	619 P	332 P	332 P	NC	NC	D	-1.5	-0.16	222 A	D	D	D
EST56447 Infant brain Homo sapiens cDNA 5' end similar to S. cerevisiae hypothetical protein YBR2018.	AA349630_at	475 P	556 P	556 P	NC	NC	D	-1.1	-0.02	41 A	D	D	D
zv11e04.r1 Soares NhlHMPu S1 Homo sapiens cDNA clone 753342 5'	AA410325_at	125 P	104 P	104 P	NC	NC	D	-1.2	-0.02	61 A	D	D	D
zv23a01.r1 Soares NhlHMPu S1 Homo sapiens cDNA clone 754440 5'	AA410529_s_at	221 P	114 P	114 P	NC	NC	D	-1.4	-0.09	96 A	D	D	D
zw57d06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774155 5'	AA429793_at	202 P	214 P	214 P	NC	NC	D	1.1	0	126 A	D	D	D
zv22d07.r1 Soares NhlHMPu S1 Homo sapiens cDNA clone 754381 5'	AA436302_at	989 P	1380 P	1380 P	NC	NC	D	1.5	0.31	736 A	D	D	D
zv84c05.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 5'	AA446695_at	92 P	68 P	68 P	NC	NC	D	-1.7	-0.13	69 A	D	D	D

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Fig. 9.5

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 42 genes LOST Abs calls PPAAA and DECREASED

gene name	Fold Change T1gllip(vs)N	Sort Score T1gllip(vs)N	Avg Diff T2gllimixP	Abs Call T2gllimixP	Diff Call T2gllimixP(vs)N	B=A	Fold Change T2gllimixP(vs)N	Sort Score T2gllimixP(vs)N	Avg Diff T2gllisolidP	Abs Call T2gllisolidP	Diff Call T2gllisolidP(vs)N
aat3e06.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 813154 3'	-6.2	-4.66	140 A	D	-4.9	-4.9	-4.9	-3.49	413 A	D	D
aat11f10.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 812971 3'	~7.2	-2.43	8 A	D	~5.3	~5.3	-1.67	44 A	D	D	D
zv14d09.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 753617 3'	~2.3	-0.39	7 A	D	~6.4	~6.4	-2.17	122 A	D	D	D
zv14g12.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 753670 3'	~12.4	-2.54	-245 A	D	~11.3	~11.3	-1.98	35 A	D	D	D
zv45a05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 766560 3'	-3.7	-1.59	115 A	D	-3	-3	-1.1	98 A	D	D	D
af14g11.s1 Soares testis NHT Homo sapiens cDNA clone 1031684 3'	~3.8	-0.5	10 A	D	~2.3	~2.3	-0.17	-26 A	D	D	D
af14h01.s1 Soares testis NHT Homo sapiens cDNA clone 1031665 3'	-4.2	-1.28	1 A	D	~5.9	~5.9	-1.98	57 A	D	D	D
ae09g06.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 951322 3'	-2.2	-0.38	41 A	D	-3.3	-3.3	-0.61	99 A	D	D	D
zc27a04.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 923502 5'	~5.7	-1.44	15 A	D	~3.5	~3.5	-0.68	22 A	D	D	D
H.sepiens mRNA for acylphosphatase, muscle type (MT) isoenzyme	~4.9	-1.12	-11 A	D	~4.0	~4.0	-0.75	41 A	D	D	D
zp78h07.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626366 5'	~18.3	-8.44	-36 A	D	~13.5	~13.5	-6.99	-116 A	D	D	D
EST47122 Fetal kidney II Homo sapiens cDNA 5' end.	-2.8	-1.23	317 A	D	-2	-2	-0.49	95 A	D	D	D
EST56447 Infant brain Homo sapiens cDNA 5' end similar to similar to	~28.8	-13.25	222 A	D	-5.5	-5.5	-3.81	392 A	D	D	D
S.cerevisiae hypothetical protein YBR2018.											
zv11e04.r1 Soares NIHMPu S1 Homo sapiens cDNA clone 753342 5'	-2	-0.25	48 A	D	-2.6	-2.6	-0.48	16 A	D	D	D
zv23a01.r1 Soares NIHMPu S1 Homo sapiens cDNA clone 754440 5'	-2.3	-0.47	115 A	D	-1.9	-1.9	-0.28	-19 A	D	D	D
zw57d06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774155 5'	-4.5	-1.63	25 A	D	~6.9	~6.9	-2.82	149 A	D	D	D
zv22d07.r1 Soares NIHMPu S1 Homo sapiens cDNA clone 754381 5'	-1.3	-0.13	313 A	D	-2.8	-2.8	-1.52	-182 A	D	D	D
zw84c05.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 783656 5'	-1.7	-0.12	-40 A	D	-2.9	-2.9	-0.56	16 A	D	D	D

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Fig. 9.6

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 42 genes LOST Abs calls PPAAs and DECREASED

gene name	B=A	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	Z	Y	W	V	U	D
aa13a06.s1 Soares NhlMPu S1 Homo sapiens cDNA clone 813154 3'		-1.7	-0.31 PPAAs	610	219	0	0	0	0	0
aa11f10.s1 Soares NhlMPu S1 Homo sapiens cDNA clone 812971 3'		-4.0	-1.07 PPAAs	138	65	0	0	0	0	0
zv14d09.s1 Soares NhlMPu S1 Homo sapiens cDNA clone 753617 3'		-4.7	-1.38 PPAAs	147	109	0	0	0	0	0
zv14g12.s1 Soares NhlMPu S1 Homo sapiens cDNA clone 753670 3'		-6.3	-1.54 PPAAs	7	0	0	0	0	0	0
zv45a05.s1 Soares ovary tumor NhlHOT Homo sapiens cDNA clone 756560 3'		-3.6	-1.52 PPAAs	471	334	0	0	0	0	0
af14g11.s1 Soares testis NHT Homo sapiens cDNA clone 1031684 3'		-2.9	-0.23 PPAAs	48	24	0	0	0	0	0
af14h01.s1 Soares testis NHT Homo sapiens cDNA clone 1031655 3'		-4.0	-1.17 PPAAs	149	52	0	0	0	0	0
ae60g06.s1 Stratagene lung carcinoma 937216 Homo sapiens cDNA clone 951322 3'		-2	-0.32 PPAAs	174	84	0	0	0	0	0
zc27a04.r1 Soares senescent fibroblasts NhlHSF Homo sapiens cDNA clone 323502 5'		-2.7	-0.38 PPAAs	90	56	0	0	0	0	0
H.sapiens mRNA for acylphosphatase, muscle type (MT) isoenzyme		-1.9	-0.17 PPAAs	79	69	0	0	0	0	0
zp78h07.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 626365 5'		-2.9	-0.97 PPAAs	341	236	0	0	0	0	0
EST147122 Fetal kidney II Homo sapiens cDNA 5' end.		-6.3	-4.68 PPAAs	619	332	0	0	0	0	0
EST56447 Infant brain Homo sapiens cDNA 5' end similar to similar to		-2.5	-1.02 PPAAs	475	556	0	0	0	0	0
S.cerevisiae hypothetical protein YBR2018.										
zv11e04.r1 Soares NhlMPu S1 Homo sapiens cDNA clone 753342 5'		-3.7	-0.88 PPAAs	125	104	0	0	0	0	0
zv23a01.r1 Soares NhlMPu S1 Homo sapiens cDNA clone 754440 5'		-6.9	-2.91 PPAAs	221	114	0	0	0	0	0
zv57d06.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774155 5'		-2.7	-0.65 PPAAs	202	214	0	0	0	0	0
zv22d07.r1 Soares NhlMPu S1 Homo sapiens cDNA clone 754381 5'		-4.8	-3.76 PPAAs	989	1380	0	0	0	0	0
zv84c05.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 763655 5'		-3.7	-0.81 PPAAs	92	68	0	0	0	0	0

Fig. 10.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 12 genes GAINED Abs calls APPPP and INCREASED  
 4 genes GAINED Abs calls APPPP and INCREASED in all comp

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP
Homo sapiens TTF-1 Interacting peptide 21 mRNA, partial cds.	AF000561_at	154 A	425 P			I	*	3.4	1.61	315
H. sapiens partial cDNA sequence; clone c-3f12.	RC_F10453_at	27 A	201 P			I	*	~4.7	1.69	195
yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	RC_H20269_at	182 A	361 P			I	*	2.9	1.25	1244
yf14h07.s1 Homo sapiens cDNA clone 126877 3'.	RC_R07210_at	175 A	743 P			I	*	4.2	2.88	512
yf01b08.s1 Homo sapiens cDNA clone 147447 3'.	RC_R81173_at	142 A	687 P			I	*	6.6	4.92	563
yp89d08.s1 Homo sapiens cDNA clone 194607 3' similar to contains Alu repetitive element.	RC_R07690_at	45 A	122 P			I	*	~2.6	0.47	151
H. sapiens partial cDNA sequence; clone c-2ea12.	RC_Z40715_at	110 A	363 P			I	*	3.3	1.31	547
zk17c02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470786 3'.	RC_AA031698_at	71 A	143 P			I	*	2	0.25	229
zl05h04.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429943 3'.	RC_AA034069_at	132 A	244 P			I	*	1.8	0.26	417
zk54e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486652 3'.	RC_AA044231_at	42 A	393 P			I	*	~8.4	4.86	282
zm79a11.s1 Stratagene neuroepithelium (#537231) Homo sapiens cDNA clone 531836 3'.	RC_AA116036_at	36 A	145 P			I	*	4.1	1.18	355
zn92a08.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 565622 3'.	RC_AA133250_at	-1 A	88 P			I	*	~2.7	0.36	101

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Fig. 10.2

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 12 genes GAINED Abs calls APPPP and INCREASED  
 4 genes GAINED Abs calls APPPP and INCREASED in all comp

gene name	Abs Call T1gllp	Diff Call T1gllp(vs)N	B=A	Fold Change T1gllp(vs)N	Sort Score T1gllp(vs)N	Avg Diff T2gllm1xp	Abs Call T2gllm1xp	Diff Call T2gllm1xp(vs)N	B=A	Fold Change T2gllm1xp(vs)N	Sort Score T2gllm1xp(vs)N	Avg Diff T2gllisolidp
Homo sapiens TTF-1 Interacting peptide 21 mRNA, partial cds.	P	*	2.8	1.01	337	P	I	*	2.7	0.95	326	
H. sapiens partial cDNA sequence; clone c-3/c12.	P	*	2.2	0.4	46	P	NC	*	~1.3	0.02	241	
yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	P	*	4.7	3.64	804	P	I	*	4.2	2.65	1463	
yt14h07.s1 Homo sapiens cDNA clone 126877 3'.	P	*	2.9	1.23	771	P	I	*	5.2	4.33	449	
yj01b08.s1 Homo sapiens cDNA clone 147447 3'.	P	*	4	2.28	442	P	I	*	3.1	1.3	366	
yp69d08.s1 Homo sapiens cDNA clone 194607 3' similar to contains Alu repetitive element.	P	*	~3.2	0.79	205	P	I	*	~3.6	1.15	98	
H. sapiens partial cDNA sequence; clone c-2ea12.	P	*	5	3.12	1448	P	I	*	13.6	14.22	1753	
zk17g02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470786 3'.	P	*	2.6	0.55	186	P	I	*	2.8	0.7	248	
zl05h04.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429943 3'.	P	*	3.1	1.28	435	P	I	*	3.3	1.42	138	
zk54e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486852 3'.	P	*	~5.6	2.52	396	P	MI	*	~6.8	3.95	245	
zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.	P	*	9.9	5.39	367	P	I	*	10.8	6.06	360	
zn92a08.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 565622 3'.	P	*	~3.1	0.53	246	P	I	*	~5.1	2.05	168	

Fig. 10.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 12 genes GAINED Abs calls APPPP and INCREASED  
 4 genes GAINED Abs calls APPPP and INCREASED in all comp

gene name	Abs Call T2gllisolidP	Diff Call T2gllisolidP(vs)N	B=A	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	N	A	B	C	D
Homo sapiens TTF-1 interacting peptide 21 mRNA, partial cds.	P	NC	*	2.7	0.92 APPPP	0	425	315	337	326	0
H. sapiens partial cDNA sequence; clone c-31c12.	P	MI	*	~1.3	-0.03 APPPP	0	201	198	46	241	0
yn53504.s1 Homo sapiens cDNA clone 172111 3'.	P	I	*	4.7	3.57 APPPP	0	361	1244	804	1463	0
yl14h07.s1 Homo sapiens cDNA clone 126877 3'.	P	NC	*	2.6	0.86 APPPP	0	743	512	771	449	0
yl01b08.s1 Homo sapiens cDNA clone 147447 3'.	P	NC	*	2.6	0.79 APPPP	0	687	563	442	366	0
yp89d08.s1 Homo sapiens cDNA clone 194607 3' similar to contains Alu repetitive element.	P	NC	*	~1.8	0.13 APPPP	0	122	151	205	98	0
H. sapiens partial cDNA sequence; clone c-2ea12.	P	I	*	16.2	17.32 APPPP	0	363	547	1448	1753	0
zk17c02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470786 3'.	P	NC	*	~2.4	0.4 APPPP	0	143	229	186	248	0
zl05h04.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429943 3'.	P	NC	*	1	0 APPPP	0	244	417	435	138	0
zk54e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486652 3'.	P	NC	*	~3.9	1.41 APPPP	0	393	262	396	245	0
zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531636 3'.	P	I	*	~8.4	5.32 APPPP	0	145	355	387	360	0
zn92a08.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 565622 3'.	P	I	*	~3.4	0.83 APPPP	0	88	101	246	168	0



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Fig. 11.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 4 genes GAINED Abs calls AAPPP and INCREASED in all comp  
 9 genes GAINED Abs calls AAPPP and INCREASED

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1gllIP	Abs Call T1gllIP	Diff Call T1gllIP(vs)N	B=A	Fold Change T1gllIP(vs)N	Sort Score T1gllIP(vs)N	Avg Diff T2gllIPmixP
Homo sapiens mRNA for CC chemokine, complete cds.	AB000221_at	91 A	97 A	97 A	97 A	NC *	1,1	0	283 P	I *	3,1	1,02	590			
Human fetal brain cDNA 3'-end GEN-097D06.	RC_D60296_at	51 A	28 A	28 A	28 A	NC *	-1,2	-0,01	139 P	I *	2,7	0,55	64			
Human fetal brain cDNA 3'-end GEN-132E11.	RC_D60813_at	40 A	27 A	27 A	27 A	NC *	~1,3	-0,02	137 P	I *	~3,2	0,73	60			
y971a11.s1 Homo sapiens cDNA clone 38542 3'.	RC_R49708_s_at	43 A	-90 A	-90 A	-90 A	NC *	~1,8	0,07	180 P	I *	~7,4	2,67	55			
H. sapiens partial cDNA sequence; clone c-02a08.	RC_Z38182_at	84 A	177 A	177 A	177 A	NC *	2,1	0,33	736 P	I *	8,7	6,92	161			
aa38e07.s1 NC1_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815536 3'.	RC_AA456821_at	46 A	48 A	48 A	48 A	NC *	1	0	109 P	I *	2,3	0,34	122			
ae53d05.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3'.	RC_AA608545_at	43 A	20 A	20 A	20 A	NC *	1,1	0	140 P	I *	~7,0	2,41	182			
ae58g12.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 951142 3'.	RC_AA620553_s_at	97 A	68 A	68 A	68 A	NC *	-1,4	-0,06	152 P	I *	3	0,98	166			
cp3087 seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	AA095119_at	3 A	100 A	100 A	100 A	I *	~6,8	1,47	60 P	I *	~6,0	1,34	137			

**SUBSTITUTE SHEET (RULE 26)**

gene name	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N
Homo sapiens mRNA for CC chemokine, complete cds.	P	I *	*	6,5	4,52	1379	P	I *	*	15,1	14,73
Homo sapiens mRNA for CC chemokine, complete cds.	P	NC	*	1,4	0,05	111	P	NC	*	-2,3	0,3
Human fetal brain cDNA 3'-end GEN-097D06.	P	NC	*	~1,3	0,02	67	P	NC	*	~1,4	0,03
Human fetal brain cDNA 3'-end GEN-132E11.	P	NC	*	~2,9	0,23	51	P	NC	*	~1,5	0,05
Human fetal brain cDNA 3'-end GEN-38542 3'.	P	NC	*	1,9	0,23	316	P	NC	*	3,8	1,54
H. sapiens partial cDNA sequence; clone C-02a08.	P	I *	*	2,6	0,47	198	P	I *	*	4,3	1,49
aa38e07.s1 NCI CGAP GCB1 Homo sapiens cDNA clone IMAGE:315556 3'.	P	I *	*	~6,5	2,49	169	P	I *	*	~4,7	1,54
ae53d05.s1 Striatogene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3'.	P	NC	*	3	1	376	P	I *	*	5,3	3,24
ae58g12.s1 Striatogene lung carcinoma 937218 Homo sapiens cDNA clone 951142 3'.	P	I *	*	~8,5	2,09	196	P	I *	*	~8,5	2,52
cp3087.seq.F Fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'.	P	I *	*	~8,5	2,09	196	P	I *	*	~8,5	2,52

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Fig. 12.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 11 genes GAINED Abs calls AAAPP and INCREASED  
 3 genes GAINED Abs calls AAAPP and INCREASED in all comp

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T1glIP	Abs Call T1glIP	Diff Call T1glIP(vs)N	B=A
ye73c08.s1 Homo sapiens cDNA clone 123374 3'.	RC_R00083_at	-523 A	413 A	-413 A	413 A	NC	*	-3.3	0.25	-956 A	956 A	NC	*
yf80e01.s1 Homo sapiens cDNA clone 155064 3'.	RC_R71391_at	69 A	897 A	897 A	897 A	NC	*	5.3	3.71	1252 A	1252 A	NC	*
seq2147 Homo sapiens cDNA clone NHB3MK-9 3'.	RC_T23991_at	219 A	85 A	85 A	85 A	NC	*	-1.2	-0.03	123 A	123 A	NC	*
yd70106.s1 Homo sapiens cDNA clone 113503 3' similar to contains Alu repetitive element.	RC_T79196_at	35 A	35 A	35 A	35 A	NC	*	-1.0	0	78 A	78 A	NC	*
zo26a09.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587992 3'.	RC_AA130596_at	59 A	20 A	20 A	20 A	NC	*	1.3	0.02	62 A	62 A	NC	*
zx89d06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810923 3'.	RC_AA459310_f_at	775 A	42 A	42 A	42 A	NC	*	-13.1	-8.46	823 A	823 A	NC	*
aa48f12.s1 NCI CGAP GCB1 Homo sapiens cDNA clone IMAGE:824207 3'.	RC_AA490965_at	10 A	-11 A	-11 A	-11 A	NC	*	-1.7	-0.04	16 A	16 A	NC	*
Human DNA binding protein homolog (DRX) mRNA, partial cds	U88047_at	54 A	57 A	57 A	57 A	NC	*	1	0	90 A	90 A	NC	*
Human DSC2 mRNA for desmocollins type 2a and 2b	X58607_at	23 A	7 A	7 A	7 A	NC	*	-2.0	-0.08	32 A	32 A	NC	*
z101b10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5'.	AA011479_at	27 A	-158 A	-158 A	-158 A	NC	*	-12.4	-1.2	90 A	90 A	NC	*
EST112387 Aorta endothelial cells Homo sapiens cDNA 5' end	AA296821_at	31 A	-10 A	-10 A	-10 A	NC	*	-2.1	-0.13	40 A	40 A	NC	*

Fig. 12.2

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 11 genes GAINED Abs calls AAAPP and INCREASED  
 3 genes GAINED Abs calls AAAPP and INCREASED in all comp

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N
ye73c08.s1 Homo sapiens cDNA clone 123374 3'.	~10.0	-0.97	666 P	I	I	*	~16.0	11.46	1365 P	I	*	*	8.6
yi80e01.s1 Homo sapiens cDNA clone 155064 3'.	7.3	6.41	1043 P	I	I	*	6.4	5.08	1512 P	I	*	*	9.5
seq2147 Homo sapiens cDNA clone NHB3MK-9 3'.	-1	0	56 P	NC	I	*	-1.1	-0.01	485 P	I	*	*	2.2
yd70f06.s1 Homo sapiens cDNA clone 113603 3' similar to contains Alu repetitive element.	~1.9	0.15	473 P	I	I	*	-8.2	5.25	204 P	I	*	*	~3.4
zo26a09.s1 Stratiene colon (#937204) Homo sapiens cDNA clone 587892 3'.	1.5	0.08	212 P	MI	MI	*	3.9	1.58	174 P	MI	*	*	~4.0
zx89d06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810923 3'.	1.1	0.01	1805 P	MI	MI	*	2.9	2.2	2171 P	MI	*	*	3.4
aa48f12.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824207 3'.	~1.5	0.03	71 P	I	I	*	~3.3	0.56	106 P	MI	*	*	~3.3
Human DNA binding protein homolog (DRX) mRNA, partial cds	1.7	0.11	172 P	I	I	*	3.2	0.84	130 P	NC	*	*	2.4
Human DSC2 mRNA for desmocollins type 2a and 2b	1.4	0.03	44 P	NC	NC	*	~1.7	0.07	146 P	I	*	*	~4.0
Human DSC2 mRNA for desmocollins type 2a and 2b	3.3	0.66	585 P	NC	NC	*	~4.3	1.2	2544 P	I	*	*	~22.9
z101b10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5'.	2	0.17	72 P	NC	NC	*	2.3	0.27	216 P	I	*	*	~5.5
EST112387 Aorta endothelial cells Homo sapiens cDNA 5' end.													

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Fig. 12.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 11 genes GAINED Abs calls AAAPP and INCREASED  
 3 genes GAINED Abs calls AAAPP and INCREASED in all comp

gene name	Sort Score T2gllisolidp(vs)N	Abs Calls	N	A	B	C	D
y573c08.s1 Homo sapiens cDNA clone 123374 3'	9.27 AAAPP	0	0	0	0	0	1385
y180e01.s1 Homo sapiens cDNA clone 155064 3'	9.45 AAAPP	0	0	0	0	0	1512
seq2147 Homo sapiens cDNA clone NHB3MK-9 3'	0.62 AAAPP	0	0	0	0	0	485
y3700c.s1 Homo sapiens cDNA clone 113603 3' similar to contains Alu repetitive element.	1 AAAPP	0	0	0	0	0	204
z026a09.s1 Strategene colon (#937204) Homo sapiens cDNA clone 587992 3'	1.53 AAAPP	0	0	0	0	0	174
zx89d06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 610923 3'	3.47 AAAPP	0	0	0	0	0	2171
aa48f12.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824207 3'	0.65 AAAPP	0	0	0	0	0	106
Human DNA binding protein homolog (DRX) mRNA, partial cds	0.39 AAAPP	0	0	0	0	0	130
Human DSC2 mRNA for desmocollins type 2a and 2b	1.13 AAAPP	0	0	0	0	0	146
z101b10.1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 429499 5'	15.52 AAAPP	0	0	0	0	0	2544
EST112387 Aorta endothelial cells Homo sapiens cDNA 5' end.	2.24 AAAPP	0	0	0	0	0	216

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Fig. 13.1

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

57 genes GAINED Abs calls AAAAP and INCREASED

sorted acc. To Avg Diff T2gillsolidp

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A
ze92h01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366481 3'	RC_AA026418_at	17A	75A	NC	NC	NC	NC	~2.5	0.27	44A	NC	NC	NC
Human fetal brain cDNA 3'-end GEN-070G07.	RC_D59847_at	187A	482A	NC	NC	NC	NC	1.5	0.21	456A	NC	NC	NC
seq2287 Homo sapiens cDNA clone Col250FL-b4HB3MA-8 3'	RC_T24099_at	-507A	-303A	NC	NC	NC	NC	~5.3	0.48	-368A	NC	NC	NC
yt16a10.s1 Homo sapiens cDNA clone 37689 3'	RC_R99292_at	40A	-38A	NC	NC	NC	NC	~2.5	-0.16	-4A	NC	NC	NC
z425e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:IM38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN).	RC_W60582_at	158A	285A	NC	NC	NC	NC	1.3	0.04	406A	NC	NC	NC
Human 5-lipoxygenase activating protein (FLAP) gene	ME3262_at	34A	-129A	MD	MD	MD	MD	~10.4	-1.27	157A	NC	NC	NC
ye89d05.s1 Homo sapiens cDNA clone 23443 3'	RC_R38678_at	-114A	-124A	NC	NC	NC	NC	~1.2	-0.01	58A	NC	NC	NC
z429g01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342096 5'	W60288_at	-17A	106A	MI	MI	MI	MI	~8.2	2.36	-4A	NC	NC	NC
zx80d02.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810051 5' similar to TR:G1020091 G1020091 NEUROPSIN: contains element LTR3 repetitive element ;.	AA465016_at	47A	-5A	NC	NC	NC	NC	~4.2	-0.62	-69A	MD	MD	MD
yd63f04.s1 Homo sapiens cDNA clone 114847 3'	RC_T79842_at	246A	442A	I	I	I	I	4.2	2.08	983A	I	I	I
zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3'	RC_AA206225_at	66A	114A	NC	NC	NC	NC	1.7	0.14	28A	NC	NC	NC
zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3'	RC_AA449914_at	173A	106A	NC	NC	NC	NC	-1.6	-0.14	184A	NC	NC	NC
H. sapiens partial cDNA sequence: clone c-3bh08.	RC_F10211_at	-6A	-2A	NC	NC	NC	NC	~1.5	-0.04	41A	NC	NC	NC
zv41f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756225 3' similar to TR:G498729 G498729 ZINC FINGER PROTEIN ;.	RC_AA480109_at	80A	22A	MD	MD	MD	MD	~5.2	-1.24	58A	NC	NC	NC
z172a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510130 3'	RC_AA053102_s_at	14A	-56A	NC	NC	NC	NC	~1.7	-0.06	-66A	NC	NC	NC
zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contig element TAR1 repetitive element ;.	RC_AA434113_at	110A	58A	NC	NC	NC	NC	-1.9	-0.19	35A	NC	NC	NC
zy62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774826 3'	RC_AA441791_at	119A	164A	NC	NC	NC	NC	1	0	-70A	NC	NC	NC
zy42c02.s1 Homo sapiens cDNA clone 285698 3'	RC_N67593_at	68A	-38A	NC	NC	NC	NC	~3.2	-0.36	-31A	NC	NC	NC
ye47b12.s1 Homo sapiens cDNA clone 120863 3'	RC_T96077_at	-179A	109A	NC	NC	NC	NC	-1.6	-0.15	174A	NC	NC	NC
Human mRNA for KIAA0318 gene, partial cds.	AB002316_at	34A	53A	NC	NC	NC	NC	1.6	0.06	79A	NC	NC	NC
ze10g07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 358620 3'	RC_W96222_at	89A	-74A	D	D	D	D	~4.4	-0.77	-42A	D	D	D
Human hemopoietic cell protein-tyrosine kinase (HCK) gene, complete cds, clone lambda-a2/1a	W16591_s_at	35A	-25A	MD	MD	MD	MD	~4.7	-0.56	-13A	NC	NC	NC
yz76b12.s1 Homo sapiens cDNA clone 288959 3'	RC_N59808_at	138A	76A	NC	NC	NC	NC	-1.8	-0.18	130A	NC	NC	NC

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Fig. 13.2

EST Bladder candidates of 17742 ESTs.  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 67 genes GAINED Abs calls AAAAP and INCREASED  
 sorted acc. To Avg Diff T2gillsolidp

gene name	Fold Change T1gillP(vs)N	Sort Score T1gillP(vs)N	Avg Diff T2gillsolidp	Abs Call T2gillsolidp	Diff Call T2gillsolidp(vs)N	Fold Change T2gillsolidp(vs)N	Sort Score T2gillsolidp(vs)N	Avg Diff T2gillsolidp	Abs Call T2gillsolidp	Diff Call T2gillsolidp(vs)N	B=A
ze92h01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366481 3'	~1.9	-0.09	48 A	NC	NC	~1.8	0.08	2770 P	I	*	B=A
Human fetal brain cDNA 3'-end GEN-070G07.	2.4	0.77	286 A	NC	NC	1.5	0.14	2179 P	I	*	
seq2287 Homo sapiens cDNA clone C0250Fb-b4HB3MA-8 3'	~3.9	0.32	-189 A	NC	NC	~4.8	0.48	2105 P	I	*	
yh16a10.s1 Homo sapiens cDNA clone 37688 3'	~1.8	-0.08	119 A	NC	NC	~2.4	0.34	1955 P	I	*	
zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	2	0.37	291 A	NC	NC	1.3	0.05	1474 P	I	*	
Human 5-lipoxygenase activating protein (FLAP) gene	2	0.18	29 A	MD	*	~4.2	-0.32	1296 P	I	*	
yc89d05.s1 Homo sapiens cDNA clone 23443 3'	~1.9	-0.09	-10 A	NC	NC	~2.7	0.21	1235 P	I	*	
zd29g01.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342096 5'	~1.7	0.04	73 A	MI	*	~2.9	0.43	1234 P	I	*	
zx80d02.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810051 5' similar to TR:G1020091 G1020091 NEUROPSIN; contains element LTR3 repetitive element ;	~6.7	-1.01	-41 A	NC	NC	~3.9	-0.42	1047 P	I	*	
yd83f04.s1 Homo sapiens cDNA clone 114847 3'	3.1	1.69	687 A	NC	NC	2	0.46	1007 P	I	*	
zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3'	~1.8	-0.1	26 A	NC	NC	~1.7	-0.07	832 P	I	*	
zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3'	1.1	0	247 A	NC	NC	1.4	0.09	758 P	I	*	
H. sapiens partial cDNA sequence; clone c-3bh08.	~1.4	0.03	-28 A	NC	NC	~1.4	-0.03	681 P	I	*	
zv41f05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756225 3' similar to TR:G498729 G498729 ZINC FINGER PROTEIN ;	-1.7	-0.12	61 A	NC	NC	-1.3	-0.03	625 P	I	*	
z172a05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510130 3'	~1.4	-0.03	-79 A	NC	NC	~1.7	-0.06	605 P	I	*	
zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;	-3.2	-0.67	22 A	NC	NC	-1	0	519 P	I	*	
zw62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3'	~2.6	0.11	150 A	NC	NC	1.1	0	519 P	I	*	
yz42c02.s1 Homo sapiens cDNA clone 285598 3'	~4.6	-1.27	-139 A	NC	NC	~4.4	-0.49	494 P	I	*	
ye47b12.s1 Homo sapiens cDNA clone 120863 3'	-1	0	318 A	NC	NC	1.8	0.26	492 P	I	*	
Human mRNA for KIAA0318 gene, partial cds.	1.4	0.04	77 A	NC	NC	2.2	0.25	490 P	I	*	
ze10g07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 358620 3'	~3.7	-0.61	-51 A	D	*	~3.3	-0.44	395 P	I	*	
Human hemopoietic cell protein-tyrosine kinase (HCK) gene, complete cds, clone lambda-a2/1a	~3.4	-0.32	-25 A	MD	*	~3.0	-0.21	358 P	I	*	
yz76b12.s1 Homo sapiens cDNA clone 288959 3'	-1.1	0	113 A	NC	NC	-1.9	-0.23	349 P	I	*	

Fig. 13.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets Incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 57 genes GAINED Abs calls AAAAP and INCREASED  
 sorted acc. To Avg Diff T2gillsolidP

gene name	Fold Change T2gillsolidP(vs)N	Sort Score T2gillsolidP(vs)N	Abs Calls	Z	Y	X	W	V	U	T
ze92h01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366481 3'	~42.6	36.56/AAAAP	0	0	0	0	0	0	0	2770
Human fetal brain cDNA 3'-end GEN-070G07.										
seq2287 Homo sapiens cDNA clone Col250FT-b4HB3MA-8 3'	11.6	15.32/AAAAP	0	0	0	0	0	0	0	2179
yh16a10.s1 Homo sapiens cDNA clone 37689 3'	~29.3	24.83/AAAAP	0	0	0	0	0	0	0	2105
zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	~28.4	25.16/AAAAP	0	0	0	0	0	0	0	1955
	8.8	9.69/AAAAP	0	0	0	0	0	0	0	1474
Human 5-lipoxygenase activating protein (FLAP) gene	~31.8	21.48/AAAAP	0	0	0	0	0	0	0	1296
yc89d05.s1 Homo sapiens cDNA clone 23443 3'	~17.3	14.43/AAAAP	0	0	0	0	0	0	0	1235
zd29g01.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342096 5'	~27.9	18.9/AAAAP	0	0	0	0	0	0	0	1234
zx80d02.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 810051 5' similar to TR:G1020091 NEUROPSIN. ; contains element LTR3 repetitive element ;	~26.1	17.88/AAAAP	0	0	0	0	0	0	0	1047
yd83f04.s1 Homo sapiens cDNA clone 114847 3'	4.3	2.44/AAAAP	0	0	0	0	0	0	0	1007
zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3'	3.8	2.38/AAAAP	0	0	0	0	0	0	0	832
zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3'	4.4	3.06/AAAAP	0	0	0	0	0	0	0	758
H. sapiens partial cDNA sequence, clone c-3hh08.	~10.8	8.12/AAAAP	0	0	0	0	0	0	0	681
zv41f05.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 756225 3' similar to TR:G498729 ZINC FINGER PROTEIN ;	5.6	3.36/AAAAP	0	0	0	0	0	0	0	625
zif72a06.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510130 3'	~8.6	5.89/AAAAP	0	0	0	0	0	0	0	605
zv24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;	4.7	2.8/AAAAP	0	0	0	0	0	0	0	519
zv62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3'	5.2	3.24/AAAAP	0	0	0	0	0	0	0	519
yz42c02.s1 Homo sapiens cDNA clone 285698 3'	~7.1	4.6/AAAAP	0	0	0	0	0	0	0	494
ye47b12.s1 Homo sapiens cDNA clone 120863 3'	2.7	1.05/AAAAP	0	0	0	0	0	0	0	492
Human mRNA for KIA0318 gene, partial cds.	8.5	5.52/AAAAP	0	0	0	0	0	0	0	490
ze10g07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 358620 3'	4.4	2.24/AAAAP	0	0	0	0	0	0	0	395
Human hemopoietic cell protein-tyrosine kinase (HCK) gene, complete cds, clone lambda-a2/1a	~8.9	4.91/AAAAP	0	0	0	0	0	0	0	358
yz76b12.s1 Homo sapiens cDNA clone 286959 3'	2.3	0.57/AAAAP	0	0	0	0	0	0	0	349



Fig. 13.4

EST Bladder candidates of 17742 ESTs.  
Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
2424 genes with sort score >= +/- 0.5 changing from N to tumor  
57 genes GAINED Abs calls AAAAP and INCREASED  
sorted acc. To Avg Diff T2gillsolidp

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP(vs)N	B=A	Fold Change TaglIP(vs)N	Sort Score TaglIP(vs)N	Avg Diff T4gillP	Abs Call T4gillP	Diff Call T4gillP(vs)N	B=A
H. sapiens parlia cDNA sequence; clone c-39g09.	RC_F10040_at	14 A	128 A	128 A	128 A	NC	*	1.4	0.06	28 A	28 A	NC	*
z62b09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3'.	RC_AA461549_at	28 A	22 A	22 A	22 A	NC	*	-1.2	-0.01	32 A	32 A	NC	*
z035004.s1 Soares fetal heart NbRH19W Homo sapiens cDNA clone 342631 3'.	RC_W06663_at	121 A	137 A	137 A	137 A	NC	*	1.1	0.01	153 A	153 A	NC	*
zn20005.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3'.	RC_AA084640_at	150 A	233 A	233 A	233 A	NC	*	1.6	0.13	177 A	177 A	NC	*
HUMGS0007856, Human Gene Signature, 3'-directed cDNA sequence.	C01169_at	-11 A	-11 A	-11 A	-11 A	NC	*	~1.6	-0.03	-10 A	-10 A	NC	*
ab04405.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 639792 3'.	RC_AA491465_at	16 A	15 A	15 A	15 A	NC	*	~1.0	0	14 A	14 A	NC	*
z041c07.s1 Soares fetal heart NbRH19W Homo sapiens cDNA clone 343212 3'.	RC_W67564_s_at	-47 A	73 A	73 A	73 A	NC	*	-3.5	0.45	8 A	8 A	NC	*
Human beta-1-adrenergic receptor mRNA, complete cds.	J03019_s_at	64 A	103 A	103 A	103 A	NC	*	1.6	0.11	163 A	163 A	NC	*
yu77b06.s1 Homo sapiens cDNA clone 239795 3'.	RC_H06622_at	46 A	-42 A	-42 A	-42 A	NC	*	~2.2	-0.12	-33 A	-33 A	NC	*
yy15h06.s1 Homo sapiens cDNA clone 271355 3'.	RC_N34686_at	-9 A	8 A	8 A	8 A	NC	*	-1.4	0.03	10 A	10 A	NC	*
yg91d08.s1 Homo sapiens cDNA clone 40992 3'.	RC_R56080_s_at	-48 A	-7 A	-7 A	-7 A	NC	*	~1.9	0.08	-5 A	-5 A	NC	*
EST71577 Homo sapiens cDNA 3' end similar to None.	RC_T34611_at	52 A	16 A	16 A	16 A	NC	*	~1.7	-0.07	37 A	37 A	NC	*
zk15e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470638 3'.	RC_AA031373_s_at	12 A	-15 A	-15 A	-15 A	NC	*	~1.6	-0.05	25 A	25 A	NC	*
Human mRNA for spl-1 proto-oncogene	X52056_at	28 A	-33 A	-33 A	-33 A	NC	*	~2.2	-0.07	37 A	37 A	NC	*
yz88g12.t1 Homo sapiens cDNA clone 290278 5'.	N77564_at	16 A	-38 A	-38 A	-38 A	D	*	~4.3	-0.22	-48 A	-48 A	D	*
HUMGS0003713, Human Gene Signature, 3'-directed cDNA sequence.	C01765_at	-10 A	-1 A	-1 A	-1 A	NC	*	~1.5	0.02	-6 A	-6 A	NC	*
ae32d03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3'.	RC_AA496936_at	20 A	5 A	5 A	5 A	NC	*	~1.5	-0.02	7 A	7 A	NC	*
zk04e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469564 3'.	RC_AA027103_at	40 A	-7 A	-7 A	-7 A	NC	*	~1.0	0	62 A	62 A	NC	*
yg32c11.s1 Homo sapiens cDNA clone 34089 3'.	RC_R44131_at	-34 A	-18 A	-18 A	-18 A	NC	*	~1.3	0.02	-28 A	-28 A	NC	*
yz48f04.s1 Homo sapiens cDNA clone 286303 3'.	RC_N67227_at	41 A	-17 A	-17 A	-17 A	NC	*	~1.9	-0.08	-24 A	-24 A	NC	*
ye52f03.s1 Homo sapiens cDNA clone 121373 3'.	RC_T96677_at	34 A	39 A	39 A	39 A	NC	*	~1.1	0	98 A	98 A	NC	*
z023g05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587768 3'.	RC_AA134965_l_at	15 A	34 A	34 A	34 A	I	*	~2.6	0.22	60 A	60 A	NC	*

Fig. 13.5

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 57 genes GAINED Abs calls AAAAP and INCREASED  
 sorted acc. To Avg Diff T2gllisolidP

gene name	Fold Change T1gllP(vs)N	Sort Score T1gllP(vs)N	Avg Diff T2gllmixP	Abs Call T2gllmixP	B=A	Fold Change T2gllmixP(vs)N	Sort Score T2gllmixP(vs)N	Avg Diff T2gllisolidP	Abs Call T2gllisolidP	B=A
H. sapiens partial cDNA sequence; clone c-39g09.	~1,3	0,02	-13 A	NC	*	~1,5	-0,04	329 P	I	*
zx62b09.s1 Soares total fetus NB2HF8 9w Homo sapiens cDNA clone 796025 3'.	1,1	0,01	28 A	NC	*	~1,3	-0,02	325 P	I	*
zd35d04.s1 Soares fetal heart NBHH19W Homo sapiens cDNA clone 342631 3'.	1,3	0,04	75 A	NC	*	-1,6	-0,11	308 P	I	*
zn20d05.s1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone 547977 3'.	1,2	0,02	157 A	NC	*	1	0	302 P	I	*
HUMGS0007858, Human Gene Signature, 3'-directed cDNA sequence.	~1,5	-0,02	-18 A	NC	*	~1,6	-0,04	287 P	I	*
ab04a05.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 639792 3'.	~1,2	0,01	14 A	NC	*	~1,2	0,01	268 P	I	*
zd41c07.s1 Soares fetal heart NBHH19W Homo sapiens cDNA clone 343212 3'.	~2,2	0,11	-68 A	NC	*	~1,4	-0,03	263 P	I	*
Human beta-1-adrenergic receptor mRNA, complete cds.	2,0	0,53	217 A	NC	*	3,4	1,07	246 P	I	*
yu77b06.s1 Homo sapiens cDNA clone 239795 3'.	~2,5	-0,15	15 A	NC	*	~1,4	-0,03	239 P	I	*
yy15h06.s1 Homo sapiens cDNA clone 271355 3'.	~1,4	0,03	-33 A	NC	*	~1,4	-0,03	222 P	I	*
yg91d08.s1 Homo sapiens cDNA clone 40992 3'.	~1,9	0,09	-101 A	NC	*	~1,7	-0,07	201 P	I	*
EST71577 Homo sapiens cDNA 3' end similar to None.	~1,3	-0,02	-32 A	D	*	~2,4	-0,16	198 P	I	*
zk15e12.s1 Soares pregnant uterus NBHPU Homo sapiens cDNA clone 470638 3'.	~1,1	0	10 A	NC	*	~1,0	0	190 P	I	*
Human mRNA for spl-1, proto-oncogene	1,3	0,02	28 A	NC	*	~1,0	0	190 P	I	*
yz89g12.r1 Homo sapiens cDNA clone 290278 5'.	~4,2	-0,23	-20 A	NC	*	~2,2	-0,09	173 P	I	*
HUMGS0003713, Human Gene Signature, 3'-directed cDNA sequence.	~1,2	0,01	-17 A	NC	*	~1,2	-0,01	167 P	I	*
ae32d03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3'.	~1,5	-0,02	-17 A	NC	*	~2,0	-0,08	167 P	I	*
zk04e03.s1 Soares pregnant uterus NBHPU Homo sapiens cDNA clone 469564 3'.	~1,5	0,05	13 A	NC	*	~1,4	0,04	166 P	I	*
yg32c11.s1 Homo sapiens cDNA clone 34089 3'.	~1,1	0,01	-12 A	NC	*	~1,4	0,03	164 P	I	*
yz48f04.s1 Homo sapiens cDNA clone 266303 3'.	~2,0	-0,1	-20 A	NC	*	~1,2	-0,01	163 P	I	*
ye52f03.s1 Homo sapiens cDNA clone 121373 3'.	~2,3	0,3	29 A	NC	*	~1,1	0	162 P	I	*
zo23g05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587768 3'.	~4,0	0,81	27 A	NC	*	~2,0	0,12	161 P	I	*

Fig. 13.6

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 57 genes GAINED Abs calls AAAAP and INCREASED  
 sorted acc. To Avg Diff T2gllsolidip

gene name	Fold Change T2gllsolidip(vs)N	Sort Score T2gllsolidip(vs)N	Abs Calls	Z	A	B	C	D
H. sapiens partial cDNA sequence; clone c-39g09.	-6.1	3.28 AAAAP	0	0	0	0	0	329
z62b09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3'.	-6.2	4.35 AAAAP	0	0	0	0	0	325
z635d04.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342631 3'.	2.6	0.71 AAAAP	0	0	0	0	0	308
z120d05.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3'.	-3.7	1.06 AAAAP	0	0	0	0	0	302
HUMGS0007858, Human Gene Signature, 3'-directed cDNA sequence.	-8.0	3.96 AAAAP	0	0	0	0	0	287
ab04a05.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone 839792 3'.	-7.1	3.41 AAAAP	0	0	0	0	0	268
z441c07.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 343212 3'.	-5.4	2.28 AAAAP	0	0	0	0	0	263
Human beta-1-adrenergic receptor mRNA, complete cds.	3.9	1.43 AAAAP	0	0	0	0	0	246
yu77b06.s1 Homo sapiens cDNA clone 239795 3'.	-4.2	1.53 AAAAP	0	0	0	0	0	239
yy15h06.s1 Homo sapiens cDNA clone 271355 3'.	-4.3	1.49 AAAAP	0	0	0	0	0	222
y991d08.s1 Homo sapiens cDNA clone 40992 3'.	-5.5	2.26 AAAAP	0	0	0	0	0	201
EST171577 Homo sapiens cDNA 3' end similar to None.	-3.1	0.83 AAAAP	0	0	0	0	0	198
zk15e12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470638 3'.	-3.5	0.98 AAAAP	0	0	0	0	0	190
Human mRNA for spl-1 proto-oncogene.	-5.0	1.8 AAAAP	0	0	0	0	0	190
yz89g12.r1 Homo sapiens cDNA clone 290278 5'.	-4.8	1.63 AAAAP	0	0	0	0	0	173
HUMGS0003713, Human Gene Signature, 3'-directed cDNA sequence.	-3.8	0.78 AAAAP	0	0	0	0	0	167
ae32d03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 887509 3'.	-4.8	1.56 AAAAP	0	0	0	0	0	167
zk04e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469564 3'.	-2.8	0.59 AAAAP	0	0	0	0	0	166
y932c11.s1 Homo sapiens cDNA clone 34089 3'.	-3.8	0.95 AAAAP	0	0	0	0	0	164
yz48f04.s1 Homo sapiens cDNA clone 286303 3'.	-3.1	0.79 AAAAP	0	0	0	0	0	163
ye52f03.s1 Homo sapiens cDNA clone 121373 3'.	-2.8	0.59 AAAAP	0	0	0	0	0	162
zo23g05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587768 3'.	-4.7	1.52 AAAAP	0	0	0	0	0	161

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Fig. 13.7

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

57 genes GAINED Abs calls AAAAP and INCREASED

sorted acc. To Avg Diff T2gillisolip

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs) N	B=A	Fold Change TaglIP (vs) N	Sort Score TaglIP (vs) N	Avg Diff T1gillIP	Abs Call T1gillIP	Diff Call T1gillIP (vs) N	B=A
yd87d10.s1 Homo sapiens cDNA clone 115219 3'.	RC_T86600_at	43 A	66 A	66 A	66 A	NC	*	~1.5	0.05	28 A	28 A	NC	*
z151f03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380477 3'.	RC_AA054087_at	77 A	73 A	73 A	73 A	NC	*	-1.1	0	33 A	33 A	NC	*
zy76b10.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA 5'.	AA444374_at	113 A	81 A	81 A	81 A	NC	*	1.6	0.1	5 A	5 A	NC	*
ys04f01.s1 Homo sapiens cDNA clone 213617 3' similar to gb.J04970 CARBOXYPEPTIDASE	RC_H72357_at	-3 A	16 A	16 A	16 A	NC	*	~1.6	0.06	31 A	31 A	NC	*
IM PRECURSOR (HUMAN); contains Alu repetitive element.													
ze37d11.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361173 3'.	RC_AA017045_at	-6 A	10 A	10 A	10 A	NC	*	~1.9	0.05	3 A	3 A	NC	*
z109c03.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430276 5'.	AA010324_at	-10 A	-4 A	-4 A	-4 A	NC	*	~1.3	0.01	38 A	38 A	NC	*
zs38b09.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 687449 3'.	RC_AA234743_at	29 A	25 A	25 A	25 A	NC	*	-1.2	-0.01	39 A	39 A	NC	*
z120d05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377483 3'.	RC_AA055892_at	20 A	12 A	12 A	12 A	NC	*	~1.5	-0.03	123 A	123 A	NC	*
z120d05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377483 3'.	RC_AA446650_at	5 A	-2 A	-2 A	-2 A	NC	*	~1.4	-0.02	15 A	15 A	NC	*
zy86g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 221116 5'.	H91747_s_at	10 A	1 A	1 A	1 A	NC	*	~1.3	-0.01	-1 A	-1 A	NC	*
ys80e03.r1 Homo sapiens cDNA clone 221116 5'.	AA401510_s_at	-1 A	-7 A	-7 A	-7 A	NC	*	~1.4	-0.01	10 A	10 A	NC	*
zu63c08.r1 Soares testis NHT Homo sapiens cDNA clone 742670 5'.	RC_W61239_at	-528 A	-704 A	-704 A	-704 A	NC	*	~4.1	0.35	-660 A	-660 A	NC	*
zd31d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342259 3'.													

Fig. 13.8

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 57 genes GAINED Abs calls AAAAP and INCREASED  
 sorted acc. To Avg Diff T2gllisolidP

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2gllimixP	Abs Call T2gllimixP	Diff Call T2gllimixP(vs)N	B=A	Fold Change T2gllimixP(vs)N	Sort Score T2gllimixP(vs)N	Avg Diff T2gllisolidP	Abs Call T2gllisolidP	Diff Call T2gllisolidP(vs)N	B=A
yd87d10.s1 Homo sapiens cDNA clone 115219 3'	~1.3	-0.02	5 A	NC	NC	*	~1.6	-0.06	152 P	1	*	*
zf51f03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380477 3'		0	108 A	NC	NC	*	1.4	0.08	152 P	1	*	*
zv76b10.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA 5'	~2.3	0.08	40 A	NC	NC	*	~3.0	0.24	152 P	1	*	*
ys04f01.s1 Homo sapiens cDNA clone 213817 3' similar to gb.J04970 CARBOXYPEPTIDASE M PRECURSOR (HUMAN); contains Alu repetitive element.	~1.7	0.06	40 A	NC	NC	*	~1.7	0.07	143 P	1	*	*
ze37d11.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361173 3'	~1.8	0.05	12 A	NC	NC	*	~1.7	0.05	137 P	1	*	*
zl09c03.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430278 5'	~2.4	0.19	53 A	NC	NC	*	~2.8	0.33	127 P	1	*	*
zs36b09.s1 Soares Nhl-HMPu S1 Homo sapiens cDNA clone 687449 3'	1.3	0.03	41 A	NC	NC	*	~1.4	0.03	100 P	1	*	*
zl20d06.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 377483 3'	~7.3	2.31	97 A	1	1	*	~4.3	0.93	98 P	1	*	*
zw89g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784178 3'	~1.5	0.03	28 A	NC	NC	*	~1.7	0.05	97 P	1	*	*
ys80e03.r1 Homo sapiens cDNA clone 221116 5'	~1.3	-0.01	9 A	NC	NC	*	~1.0	0	94 P	1	*	*
zu63c08.r1 Soares testis NHT Homo sapiens cDNA clone 742670 5'	~1.6	0.03	-1 A	NC	NC	*	~1.0	0	92 P	1	*	*
zd31d10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 342259 3'	~3.8	-0.31	-54 A	NC	NC	*	~1.3	-0.02	-116 P	1	*	*

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Fig. 13.9

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 57 genes GAINED Abs calls AAAAP and INCREASED  
 sorted acc. To Avg Diff T2gllisolidP

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	z	y	m	u	d
yd87d10.s1 Homo sapiens cDNA clone 115219 3'.	~3.6	1.13/AAAAP	0 0 0 0	0	0	0	0	152
zf51f03.s1 Soares retina N2b4HR Homo sapiens cDNA clone 380477 3'.	2.8	0.73/AAAAP	0 0 0 0	0	0	0	0	152
zv76b10.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA 5'.	~5.2	1.64/AAAAP	0 0 0 0	0	0	0	0	152
ys04f01.s1 Homo sapiens cDNA clone 213817 3' similar to gb:J04970 CARBOXYPEPTIDASE	~3.1	0.6/AAAAP	0 0 0 0	0	0	0	0	143
M PRECURSOR (HUMAN); contains Alu repetitive element.								
ze37d11.s1 Soares retina N2b4HR Homo sapiens cDNA clone 361173 3'.	~3.6	0.66/AAAAP	0 0 0 0	0	0	0	0	137
zi09c03.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 430276 5'.	~3.9	0.95/AAAAP	0 0 0 0	0	0	0	0	127
zs38b09.s1 Soares NhlHwPu S1 Homo sapiens cDNA clone 687449 3'.	~3.0	0.52/AAAAP	0 0 0 0	0	0	0	0	100
zf20d06.s1 Soares fetal heart NhlH19W Homo sapiens cDNA clone 377483 3'.	~4.4	1.17/AAAAP	0 0 0 0	0	0	0	0	98
zw89g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 784178 3'.	~3.2	0.58/AAAAP	0 0 0 0	0	0	0	0	97
ys80e03.r1 Homo sapiens cDNA clone 221116 5'.	~3.1	0.55/AAAAP	0 0 0 0	0	0	0	0	94
zu63c08.r1 Soares testis NHT Homo sapiens cDNA clone 742670 5'.	~3.3	0.56/AAAAP	0 0 0 0	0	0	0	0	92
zd31d10.s1 Soares fetal heart NhlH19W Homo sapiens cDNA clone 342259 3'.	~6.9	0.79/AAAAP	0 0 0 0	0	0	0	0	-116

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Fig. 14.1

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

20 genes only in T2gill mix Abs calls AAAPA and INCREASED

sorted acc. To Avg Diff T2gill mix

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs) N	B=A	Fold Change TaglIP (vs) N	Sort Score TaglIP (vs) N	Avg Diff T1gillP	Abs Call T1gillP
zx58c10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446706 5' similar to contains Alu repetitive element.	AA203639_at	52 A	-24 A	MI *	3	0.7	159 A				
Human prealbumin gene, complete cds.	M11844_at	45 A	107 A	NC *	-1	0	183 A				
zq77f02.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element ;	RC_AA206042_at	-730 A	-439 A	NC *	-7.1	0.68	-856 A				
y203e04.s1 Homo sapiens cDNA clone 281982 3'.	RC_N51097_at	187 A	246 A	NC *	1.3	0.06	264 A				
yl70f08.s1 Soares infant brain 1NIB Homo sapiens cDNA clone 43327 3'.	RC_H05527_at	265 A	222 A	NC *	-1.2	-0.03	335 A				
z105d11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN. ;	AA115572_s_at	52 A	55 A	NC *	1.1	0	85 A				
yl14b12.s1 Homo sapiens cDNA clone 148703 3'.	RC_H12863_at	81 A	207 A	NC *	2.6	0.58	294 A				
ab36e04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5'.	AA489287_at	33 A	100 A	NC *	3	0.58	90 A				
ye49h07.s1 Homo sapiens cDNA clone 121117 3'.	RC_T96383_at	-4 A	81 A	NC *	-2.8	0.34	24 A				
yq98g12.s1 Homo sapiens cDNA clone 203878 3'.	RC_H56453_at	11 A	99 A	NC *	2.1	0.24	89 A				
z103h01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491281 3'.	RC_AA152194_at	24 A	62 A	NC *	1.3	0.03	84 A				
H. sapiens partial cDNA sequence; clone c-0ed05.	RC_Z38520_at	13 A	49 A	NC *	-1.8	0.07	38 A				
yd06g09.s1 Homo sapiens cDNA clone 25061 3' similar to contains Alu repetitive element.	RC_R38944_at	-19 A	47 A	NC *	-2.4	0.14	-31 A				

Fig. 14.2

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor

20 genes only in T2gill mix Abs calls AAAPA and INCREASED

sorted acc. To Avg Diff T2gill mix

gene name	MI *	Fold Change T1gillP(vs)N	Sort Score T1gillP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP	Diff Call T2gillmixP(vs)N	B=A	Fold Change T2gillmixP(vs)N	Sort Score T2gillmixP(vs)N	Avg Diff T2gillmixP	Abs Call T2gillmixP
zx58c10.r1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446706 5' similar to contains Alu repetitive element.	NC *	3,1	0,75	573 P	I *	7,5	4,29	445 A			
Human prealbumin gene, complete cds.	NC *	1,1	0	526 P	I *	4,7	2,86	149 A			
zq7702.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSR1 repetitive element.	NC *	~3,6	-0,29	488 P	I *	~23,2	13,95	-1216 A			
y203e04.s1 Homo sapiens cDNA clone 281982 3'.	NC *	1,4	0,09	418 P	I *	2,2	0,5	317 A			
y70f08.s1 Soares infant brain 1NIB Homo sapiens cDNA clone 43327 3'.	NC *	1,3	0,05	402 P	I *	2,1	0,32	637 A			
zi05d11.r1 Soares pregnant uterus NBHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN.	NC *	4,9	2,07	292 P	I *	8,7	5,44	235 A			
y14b12.s1 Homo sapiens cDNA clone 148703 3'.	NC *	3,6	1,39	285 P	I *	3,5	1,31	229 A			
ab36e04.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5'.	NC *	2,7	0,43	241 P	I *	10,8	5,81	116 A			
ye49h07.s1 Homo sapiens cDNA clone 121117 3'.	NC *	~1,6	0,05	185 P	I *	~4,1	1,26	138 A			
yq98g12.s1 Homo sapiens cDNA clone 203878 3'.	NC *	~2,6	0,34	170 P	I *	~4,0	1,11	57 A			
zi03h01.s1 Soares pregnant uterus NBHPU Homo sapiens cDNA clone 491281 3'.	NC *	1,7	0,12	167 P	I *	~3,0	0,69	86 A			
H. sapiens partial cDNA sequence; clone c-0ed05.	NC *	~1,5	0,04	134 P	I *	~3,0	0,57	118 A			
y006g09.s1 Homo sapiens cDNA clone 25061 3' similar to contains Alu repetitive element.	NC *	~1,2	-0,01	133 P	I *	~3,5	0,73	147 A			



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Fig. 14.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 20 genes only in T2gill mix Abs calls AAAPA and INCREASED  
 sorted acc. To Avg Diff T2gill mix

gene name	Diff Call T2gillsolidP(vs)N	B=A	Fold Change T2gillsolidP(vs)N	Sort Score T2gillsolidP(vs)N	Abs Calls	N	A	B	C	D
z58c10.1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 446706 5' similar to contains Alu repetitive element.	NC *	10,6	7,12	AAAPA	0	0	0	0	573	0
Human prealbumin gene, complete cds.	NC *	1	0	AAAPA	0	0	0	0	526	0
zq7702.s1 Stralagene hNT neuron (#937233) Homo sapiens cDNA clone 647643 3' similar to contains element MSRI repetitive element.	NC *	~7,9	-0,92	AAAPA	0	0	0	0	488	0
y203e04.s1 Homo sapiens cDNA clone 281982 3'.	NC *	1,7	0,22	AAAPA	0	0	0	0	418	0
y170108.s1 Soares infant brain 1NIB Homo sapiens cDNA clone 43327 3'.	NC *	2,4	0,88	AAAPA	0	0	0	0	402	0
z105d11.1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN.	NC *	4,5	1,76	AAAPA	0	0	0	0	292	0
y14b12.s1 Homo sapiens cDNA clone 148703 3'.	NC *	2,8	0,77	AAAPA	0	0	0	0	285	0
ab36e04.1 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone 842910 5'.	NC *	~4,1	1,28	AAAPA	0	0	0	0	241	0
ye49h07.s1 Homo sapiens cDNA clone 121117 3'.	NC *	~3,0	0,56	AAAPA	0	0	0	0	185	0
yq88g12.s1 Homo sapiens cDNA clone 203878 3'.	NC *	~1,7	0,07	AAAPA	0	0	0	0	170	0
z103h01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491281 3'.	NC *	~1,5	0,07	AAAPA	0	0	0	0	167	0
H. sapiens partial cDNA sequence: clone c-0ed05.	I *	~2,5	0,34	AAAPA	0	0	0	0	134	0
y006g09.s1 Homo sapiens cDNA clone 25051 3' similar to contains Alu repetitive element.	NC *	~3,4	0,71	AAAPA	0	0	0	0	133	0

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Fig. 14.4

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 20 genes only in T2gIII mix Abs calls AAAPA and INCREASED  
 sorted acc. To Avg Diff T2gIII mix

Gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TagII P	Abs Call TagII P	Diff Call TagII P (vs) N	B=A	Fold Change TagII P (vs) N	Sort Score TagII P (vs) N	Avg Diff T1gIII P	Abs Call T1gIII P
zo16e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587084 3'.	RC_AA133926_at	5 A	14 A	14 A	14 A	NC *	*	~1,2	0,01	18 A	18 A
za68f06.s1 Homo sapiens cDNA clone 297731 3' similar to gbX59244 ZINC FINGER PROTEIN 43 (HUMAN);	RC_N69908_f_at	-54 A	19 A	19 A	19 A	NC *	*	~2,5	0,16	33 A	33 A
zo02c02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 556498 3' similar to contains Alu repetitive element;	RC_AA151945_at	12 A	21 A	21 A	21 A	NC *	*	~1,2	0,01	49 A	49 A
SOX5=Sry-related HMG box gene (alternatively spliced) [human, testis, mRNA, 1473 nt]	S83308_at	18 A	40 A	40 A	40 A	NC *	*	2,2	0,17	53 A	53 A
zv11b06.s1 Soares Nhl-HMPu S1 Homo sapiens cDNA clone 753299 3'.	RC_AA406570_at	23 A	5 A	5 A	5 A	NC *	*	~2,4	0,09	-34 A	-34 A
z167g04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509718 3' similar to contains Alu repetitive element; contains element PTR5 repetitive element ;	RC_AA058314_at	-3 A	21 A	21 A	21 A	NC *	*	~1,5	0,04	22 A	22 A
yr31g12.s1 Homo sapiens cDNA clone Z06950 3'.	RC_R98735_at	-1040 A	447 A	447 A	447 A	NC *	*	~13,5	8,2	327 A	327 A

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Fig. 14.5

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 20 genes only In T2glll mix Abs calls AAAPA and INCREASED  
 sorted acc. To Avg Diff T2glll mix

gene name	Diff Call T1glllP(vs)N	B=A	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP
zo16e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587084 3'.	NC *	~1,3	0,02	124 P	I *	~3,0	0,53	27 A				
zo68f06.s1 Homo sapiens cDNA clone 297731 3' similar to gb:X59244 ZINC FINGER PROTEIN 43 (HUMAN);.	I *	~2,8	0,19	117 P	I *	~3,3	0,58	-104 A				
zo02c02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 565498 3' similar to contains	NC *	~1,8	0,07	106 P	I *	~3,7	1,04	-79 A				
Alu repetitive element.												
SOX5-Sry-related HMG box gene (alternatively spliced) [human, testis, mRNA, 1473 nt]	NC *	~2,7	0,33	98 P	I *	~3,6	0,77	111 A				
zvt1b06.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 753299 3'.	NC *	~1,8	-0,05	92 P	I *	~4,6	1,03	-99 A				
zi67g04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509718 3' similar to contains	NC *	~1,5	0,04	65 P	I *	~3,8	1,01	10 A				
Alu repetitive element; contains element PTR6 repetitive element ;.												
yr31g12.s1 Homo sapiens cDNA clone 206950 3'.	NC *	~10,9	5,82	-244 P	I *	~6,8	0,73	-670 A				

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Fig. 14.6

EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

20 genes only in T2gIII mix Abs calls AAAPA and INCREASED

sorted acc. To Avg Diff T2gIII mix

gene name	Diff Call T2gIIIsoIIdP(vs)N	B=A	Fold Change T2gIIIsoIIdP(vs)N	Sort Score T2gIIIsoIIdP(vs)N	Abs Calls	z	y	x	u	t
zo16e11.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587084 3'	NC	~1.3	0.03	AAAPA	0	0	0	0	124	0
za68f06.s1 Homo sapiens cDNA clone 297731 3' similar to gb:X59244 ZINC FINGER PROTEIN 43 (HUMAN);.	NC	~1.7	-0.08	AAAPA	0	0	0	0	117	0
zo07c02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 566498 3' similar to contains	NC	~1.6	0.06	AAAPA	0	0	0	0	106	0
Alu repetitive element;										
SOX5=Sox-related HMG box gene (alternatively spliced) [human, testis, mRNA, 1473 nt]	I	~3.0	0.56	AAAPA	0	0	0	0	98	0
zv11b06.s1 Soares Nhl-HMPu S1 Homo sapiens cDNA clone 753299 3'	NC	~3.0	-0.2	AAAPA	0	0	0	0	92	0
zu67g04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509718 3' similar to contains	NC	~1.2	0.01	AAAPA	0	0	0	0	65	0
Alu repetitive element;contains element PTR5 repetitive element ;.										
yr31g12.s1 Homo sapiens cDNA clone 206950 3'	NC	~2.6	-0.21	AAAPA	0	0	0	0	-244	0

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Fig. 15.1

## EST Bladder candidates of 17742 ESTs

Exclusion of datasets incl AFFX, all NC, all A, 3xNC + M\*

2424 genes with absolute value of sort score &gt;= 0.5 changing from N to tumor in at least 1 comparison

14 genes gained only in T1gllp Abs Calls AAPAA and Increased

gene name	Probe Set EST subA & B	Avg Diff N	Abs Call N	Avg Diff TaglIP	Abs Call TaglIP	Diff Call TaglIP (vs) N	B=A	Fold Change TaglIP (vs) N	Sort Score TaglIP (vs) N
yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element.	RC_R33146_at	28 A	28 A	28 A	28 A	NC *	*	~1.0	0
yw65f02.s1 Homo sapiens cDNA clone 257115 3'	RC_N30808_at	120 A	108 A	108 A	108 A	NC *	*	~1.1	0
zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'	RC_AA084138_at	79 A	61 A	61 A	61 A	NC *	*	1.1	0
similar to none.	D82418_at	18 A	48 A	48 A	48 A	NC *	*	~6.4	-0.4
zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'	RC_AA223902_at	215 A	87 A	87 A	87 A	NC *	*	-1.5	-0.08
aa65d11.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825813 3'	RC_AA505136_at	-8 A	2 A	2 A	2 A	NC *	*	~2.5	-0.09
zk05c04.s1 Soares pregnant uterus NhHPU Homo sapiens cDNA clone 469638 3'	RC_AA027823_at	50 A	69 A	69 A	69 A	NC *	*	1.4	0.04
y123g09.s1 Homo sapiens cDNA clone 140128 3'	RC_R65998_at	-19 A	1 A	1 A	1 A	NC *	*	~1.7	0.07
yx59d10.r1 Homo sapiens cDNA clone 266035 5'	N28843_at	28 A	87 A	87 A	87 A	NC *	*	3.1	0.57
H. sapiens partial cDNA sequence; clone c-12c11.	RC_F02541_at	3 A	-7 A	-7 A	-7 A	NC *	*	~1.2	-0.01
zk55g12.r1 Soares pregnant uterus NhHPU Homo sapiens cDNA clone 486790 5'	AA043223_at	14 A	21 A	21 A	21 A	NC *	*	~1.4	0.02
zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3'	RC_AA424524_at	23 A	25 A	25 A	25 A	NC *	*	1.1	0
yf70a09.s1 Homo sapiens cDNA clone 27448 3'	RC_R40166_at	65 A	-50 A	-50 A	-50 A	NC *	*	1.1	0
Human mRNA for KIAA0180 gene, partial cds	D80002_at	-197 A	18 A	18 A	18 A	NC *	*	~27.5	1.55

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Fig. 15.2

EST Bladder candidates of 17742 ESTs

Exclusion of datasets incl AFFX, all NC, all A, 3xNC + M\*

2424 genes with absolute value of sort score  $\geq 0.5$  changing from N to tumor in at least 1 comparison

14 genes gained only in T1glllp Abs Calls AAPAA and increased

gene name	Avg Diff T1glllp	Abs Call T1glllp	Diff Call T1glllp(vs)N	B=A	Fold Change T1glllp(vs)N	Sort Score T1glllp(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A	Fold Change T2glllmiXP(vs)N
yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element.	956 P	I *	I *	I *	~20.4	14.82	26 A	NC	NC	I *	~1.0
yw65f02.s1 Homo sapiens cDNA clone 257115 3'.	516 P	I *	I *	I *	~8.0	4.52	87 A	NC	NC	I *	~1.7
zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'.	296 P	I *	I *	I *	4.4	2.06	58 A	NC	NC	I *	1.4
similar to none.	241 P	I *	I *	I *	~4.3	0.96	-72 A	NC	NC	I *	~4.0
zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'.	239 P	I *	I *	I *	1.3	0.05	-8 A	NC	NC	I *	~3.2
aa65d11.s1 NC1 CGAP_GCB1.Homo sapiens cDNA clone IMAGE:825813 3'.	201 P	I *	I *	I *	~11.4	4.62	20 A	NC	NC	I *	~1.9
zk05c04.s1 Soares pregnant uterus NHHPU Homo sapiens cDNA clone 469638 3'.	191 P	I *	I *	I *	3.8	1.21	112 A	NC	NC	I *	~2.0
y23g09.s1 Soares sapiens cDNA clone 140128 3'.	139 P	I *	I *	I *	~3.8	0.78	35 A	NC	NC	I *	~1.9
yx59d10.r1 Homo sapiens cDNA clone 266035 5'.	136 P	I *	I *	I *	4.8	1.48	31 A	NC	NC	I *	~1.1
H. sapiens partial cDNA sequence; clone c-12c11.	118 P	I *	I *	I *	~3.4	0.7	82 A	NC	NC	I *	~2.3
zk55g12.r1 Soares pregnant uterus NHHPU Homo sapiens cDNA clone 486790 5'.	88 P	I *	I *	I *	3.1	0.56	44 A	NC	NC	I *	~1.5
zv90g02.s1 Soares Nh-HMPu S1 Homo sapiens cDNA clone 767090 3'.	72 P	I *	I *	I *	3.1	0.5	59 A	NC	NC	I *	~2.2
y770a09.s1 Homo sapiens cDNA clone 27448 3'.	-36 P	I *	I *	I *	6.4	4.13	-26 A	NC	NC	I *	1.8
Human mRNA for KIAA0180 gene, partial cds	-131 P	I *	I *	I *	~14.9	0.91	-77 A	NC	NC	I *	~6.0

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Fig. 15.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of datasets incl AFFX; all NC, all A, 3xNC + M\*  
 2424 genes with absolut value of sort score >= 0,5 changing from N to tumor in at least 1 comparison  
 14 genes gained only in T1gIIP Abs Calls AAPAA and Increased

gene name	Sort Score T2gIIP (vs)N	Avg Diff T2gIIP	Abs Call T2gIIP	Diff Call T2gIIP (vs)N	B=A	Fold Change T2gIIP (vs)N	Sort Score T2gIIP (vs)N	Abs Calls
yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element.	0	19 A	19 A	NC *	*	~1,1	-0,01	AAPAA
yw65f02.s1 Homo sapiens cDNA clone 257115 3'	0,08	-97 A	-97 A	NC *	*	~1,2	-0,01	AAPAA
zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3'	0,06	253 A	253 A	NC *	*	4,1	1,84	AAPAA
similar to none.	-0,27	-103 A	-103 A	NC *	*	~4,0	-0,3	AAPAA
zr13a10.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone 648666 3'	-0,62	-139 A	-139 A	NC *	*	~3,7	-0,36	AAPAA
aa65d11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825813 3'	0,07	-64 A	-64 A	NC *	*	~2,4	-0,13	AAPAA
zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3'	0,22	119 A	119 A	NC *	*	~1,9	0,19	AAPAA
y123g09.s1 Homo sapiens cDNA clone 140128 3'	0,1	-23 A	-23 A	NC *	*	~1,3	0,02	AAPAA
yx59d10.r1 Homo sapiens cDNA clone 266035 5'	0	17 A	17 A	NC *	*	~1,3	-0,02	AAPAA
H. sapiens partial cDNA sequence; clone c-12c11.	0,21	-17 A	-17 A	NC *	*	~1,0	0	AAPAA
zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5'	0,05	183 A	183 A	NC *	*	~4,8	1,67	AAPAA
zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3'	0,2	42 A	42 A	NC *	*	~1,6	0,04	AAPAA
yf70a09.s1 Homo sapiens cDNA clone 27448 3'	0,15	67 A	67 A	NC *	*	~2,7	0,63	AAPAA
Human mRNA for KIAA0180 gene, partial cds	0,35	-80 A	-80 A	NC *	*	~3,8	0,29	AAPAA

Fig. 16.1

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 39 genes in Tagl only, Abs calls APAAA and INCREASED  
 sorted acc. To Avg Diff Tagl

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff Tagl P	Abs Call Tagl P	Diff Call Tagl P (vs) N	B=A	Fold Change Tagl P (vs) N	Sort Score Tagl P (vs) N	Avg Diff Tagl P	Abs Call Tagl P	Diff Call Tagl P (vs) N	B=A
H. sapiens partial cDNA sequence; clone c-1pb12.	RC_F03192_at	484 A	2936 P				*	12.6	18	1701 A		NC	*
zdbtg10.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 347682 3'.	RC_W81552_at	-143 A	1363 P				*	-19.7	13.57	-26 A		I	*
H. sapiens partial cDNA sequence; clone c-10c01.	RC_F02470_at	162 A	629 P				*	6	5.38	325 A		NC	*
zc20b06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 322835 3'.	RC_W44927_at	314 A	497 P				*	2.3	0.85	469 A		NC	*
similar to PIR:S44218 S44218 testin - mouse [1];													
yg45b01.s1 Homo sapiens cDNA clone 35626 3'.	RC_R45292_at	148 A	494 P				*	3.3	1.55	207 A		NC	*
yr47b09.s1 Homo sapiens cDNA clone 208409 3' similar to contains Alu repetitive element;	RC_H62159_at	250 A	490 P				*	2	0.44	172 A		NC	*
contains MIER15 repetitive element ;													
yf45a10.s2 Homo sapiens cDNA clone 129786 3'.	RC_R17059_at	140 A	471 P				*	3.4	1.54	248 A		NC	*
ym30c10.s1 Homo sapiens cDNA clone 49795 3'.	RC_H15259_at	50 A	340 P				*	8.6	5.21	152 A		NC	*
29a6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	W26376_at	18 A	285 P				*	1.7	0.26	-175 A		NC	*
H. sapiens mRNA for putative carboxylesterase	Y09616_at	169 A	285 P				*	1.7	0.2	138 A		NC	*
zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.	AA425593_at	75 A	285 P				*	3.8	1.47	-54 A		NC	*
zt08e05.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone 712544 3'.	RC_AA278980_at	-33 A	234 P				*	~17.5	6.94	36 A		I	*
ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	RC_H14089_at	42 A	230 P				*	~5.0	2	31 A		NC	*
yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	RC_R46079_f_at	-42 A	205 P				*	~6.2	2.41	-84 A		NC	*
zc17d10.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3'.	RC_W15360_at	-43 A	199 P				*	~6.1	2.32	108 A		NC	*
similar to PIR:S39983 S39983 eps8 protein - mouse ;													
Human mRNA for retinol acid receptor-like protein	X52773_at	-18 A	195 P				*	~14.1	5.41	70 A		I	*
ze75b05.s1 Soares fetal heart NbH19W Homo sapiens cDNA clone 364785 3' similar to	RC_AA03886_s_at	-171 A	158 P				*	~7.9	2.59	11 A		I	*
TR:G451330 G451330 STEROL REGULATORY ELEMENT BINDING PROTEIN-2 ;													
zc31a10.s1 Stragelene colon (#937204) Homo sapiens cDNA clone 588474 3'.	RC_AA142493_at	131 A	152 P				*	2.8	0.6	59 A		NC	*
Homo sapiens mRNA; expressed sequence tag; clone DKFZphsmu1_1b13, 3' read.	RC_Z98492_at	-13 A	126 P				*	~4.0	0.94	25 A		NC	*
H. sapiens partial cDNA sequence.	F18201_at	30 A	121 P				*	4	1.05	48 A		NC	*
yh10f08.s1 Homo sapiens cDNA clone 42872 3'.	RC_R61883_at	10 A	121 P				*	~3.8	0.83	139 A		I	*
30e12 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	W26505_at	34 A	117 P				*	3.4	0.8	52 A		MI	*



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Fig. 16.2

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 39 genes In Tagl only , Abs calls APAAA and INCREASED  
 sorted acc. To Avg Diff Tagl

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	Fold Change T2glllmiXP(vs)N	Sort Score T2glllmiXP(vs)N	Avg Diff T2glllmiXP	Abs Call T2glllmiXP	Diff Call T2glllmiXP(vs)N	B=A
H. sapiens partial cDNA sequence; clone c-1pb12.	2.5	1.29	-41 A	D	*	~16.6	-10.38	170 A	D	*	B=A
zdb7g10.s1 Soares fetal heart NBHH19W Homo sapiens cDNA clone 347682 3'.	-3.4	0.27	-86 A	NC	*	~1.9	0.1	-171 A	NC	*	
H. sapiens partial cDNA sequence; clone c-10c01.	2	0.38	498 A	NC	*	3.1	1.33	451 A	NC	*	
zcc20b06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 322835 3'.	1.5	0.16	212 A	NC	*	-1.5	-0.13	653 A	NC	*	
similar to PIR-S44218 S44218 testin - mouse [1].											
yg46b01.s1 Homo sapiens cDNA clone 35626 3'.	1.4	0.08	257 A	NC	*	1.7	0.21	86 A	NC	*	
yg47b09.s1 Homo sapiens cDNA clone 208409 3' similar to contains Alu repetitive element;	1.1	0	140 A	NC	*	-1.1	-0.01	77 A	NC	*	
contains MER15 repetitive element ;											
yg45a10.s2 Homo sapiens cDNA clone 129786 3'.	1.8	0.23	241 A	NC	*	1.7	0.2	22 A	NC	*	
ym30c10.s1 Homo sapiens cDNA clone 49795 3'.	3.1	0.73	54 A	NC	*	-1.1	0	-114 A	NC	*	
29a6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	-4.0	0.84	248 A	NC	*	-8.7	3.99	385 A	NC	*	
H. sapiens mRNA for putative carboxylesterase	-1.2	-0.03	106 A	NC	*	-1.6	-0.13	37 A	NC	*	
zvw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone IMAGE:712544 3'.	-2.5	-0.33	187 A	NC	*	3.8	1.46	72 A	NC	*	
z08e05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712544 3'.	-6.5	0.76	45 A	NC	*	-3.7	0.38	-70 A	NC	*	
ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	-2.7	-0.47	-39 A	NC	*	~2.3	-0.15	64 A	NC	*	
yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	~1.9	-0.08	113 A	NC	*	-3.6	0.64	-71 A	NC	*	
zc17d10.s1 Soares parathyroid tumor NBHPA Homo sapiens cDNA clone 322579 3'.	~4.1	0.85	43 A	NC	*	-2.4	0.16	-4 A	NC	*	
similar to PIR-S39983 S39983 eps8 protein - mouse ;											
Human mRNA for retinoic acid receptor-like protein	~5.3	1.11	27 A	NC	*	-2.5	0.12	-27 A	NC	*	
ze75b05.s1 Soares fetal heart NBHH19W Homo sapiens cDNA clone 364785 3' similar to	~4.8	0.43	39 A	I	*	~4.5	0.44	-25 A	I	*	
TR:G451330 G451330 STEROL REGULATORY ELEMENT BINDING PROTEIN-2. ;											
zo31a10.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588474 3'.	-2.2	-0.32	47 A	NC	*	~2.4	-0.37	-23 A	NC	*	
Homo sapiens mRNA; expressed sequence tag; clone DKFZphsnu1_1b13, 3' read.	~1.8	0.07	53 A	I	*	-2.0	0.11	26 A	NC	*	
H. sapiens partial cDNA sequence.	~1.9	-0.06	29 A	NC	*	~1.1	0	76 A	NC	*	
yh10f08.s1 Homo sapiens cDNA clone 42872 3'.	~3.7	0.91	147 A	NC	*	-3.3	0.72	134 A	NC	*	
30e12 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	1.5	0.06	63 A	MI	*	1.9	0.14	164 A	NC	*	

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Fig. 16.3

EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score >= +/- 0.5 changing from N to tumor  
 39 genes in Tagl only, Abs calls APAAA and INCREASED  
 sorted acc. To Avg Diff Tagl

gene name	Fold Change T2gllisolidP(vs)N	Sort Score T2gllisolidP(vs)N	Abs Calls	Z	<	m	c	d
H. sapiens partial cDNA sequence; clone c-1pb12.	~9.1	-5.92 APAAA	0	2936	0	0	0	0
zd87g10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347682 3'.	~1.4	-0.04 APAAA	0	1363	0	0	0	0
H. sapiens partial cDNA sequence; clone c-10c01.	2.8	1.03 APAAA	0	629	0	0	0	0
zc20b06.s1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 322835 3' similar to PIR-S44218 S44218 testin - mouse [1] ;	2.1	0.61 APAAA	0	497	0	0	0	0
yg46b01.s1 Homo sapiens cDNA clone 35626 3'.	-2.6	-0.62 APAAA	0	494	0	0	0	0
yg47b09.s1 Homo sapiens cDNA clone 208409 3' similar to contains Alu repetitive element; contains MER15 repetitive element ;	-3.2	-1.04 APAAA	0	490	0	0	0	0
yg45a10.s2 Homo sapiens cDNA clone 129786 3'.	~1.7	-0.07 APAAA	0	471	0	0	0	0
ym30c10.s1 Homo sapiens cDNA clone 49795 3'.	~1.7	-0.08 APAAA	0	340	0	0	0	0
29a6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	-10.0	5.68 APAAA	0	285	0	0	0	0
H. sapiens mRNA for putative carboxylesterase	~4.2	-1.36 APAAA	0	285	0	0	0	0
zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.	-2.4	-0.43 APAAA	0	285	0	0	0	0
zi08e05.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712544 3'.	~1.4	-0.02 APAAA	0	234	0	0	0	0
ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	~1.7	-0.13 APAAA	0	230	0	0	0	0
yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	~1.4	-0.04 APAAA	0	205	0	0	0	0
zc17d10.s1 Soares parathyroid tumor NbHPA Homo sapiens cDNA clone 322579 3' similar to PIR-S39983 eps8 protein - mouse ; ;	~1.6	0.05 APAAA	0	199	0	0	0	0
Human mRNA for retinoic acid receptor-like protein	~1.2	-0.01 APAAA	0	195	0	0	0	0
ze75b05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 364785 3' similar to TFR:G451330 G451330 STEROL REGULATORY ELEMENT BINDING PROTEIN-2. ;	~3.1	0.27 APAAA	0	158	0	0	0	0
zo31a10.s1 Stratagene colon (#337204) Homo sapiens cDNA clone 588474 3'.	~3.2	-0.58 APAAA	0	152	0	0	0	0
Homo sapiens mRNA; expressed sequence tag; clone DKFZphsnu1_1b13. 3' read.	~1.5	0.05 APAAA	0	126	0	0	0	0
H. sapiens partial cDNA sequence.	~1.9	0.15 APAAA	0	121	0	0	0	0
yh10j08.s1 Homo sapiens cDNA clone 42872 3'.	~2.8	0.47 APAAA	0	121	0	0	0	0
30e12 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA.	~4.2	1.3 APAAA	0	117	0	0	0	0

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Fig. 16.4

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor

39 genes in Tagli only, Abs calls APAAA and INCREASED

sorted acc. To Avg Diff Tagli

gene name	Probe Set EST	Avg Diff N	Abs Call N	Avg Diff TagliP	Abs Call TagliP	Diff Call TagliP(vs)N	B=A	Fold Change TagliP(vs)N	Sort Score TagliP(vs)N	Avg Diff T1glilP	Abs Call T1glilP	Diff Call T1glilP(vs)N	B=A
zn53e03.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561916 3'	RC_AA085676_at	8 A	98 P	98 P	98 P	I	*	-6.6	1.84	122 A	122 A	NC	*
ze55c07.r1 Soares retina N2b4HR Homo sapiens cDNA clone 362892 5' similar to	AA018804_at	-1 A	98 P	98 P	98 P	I	*	-7.1	2.02	-2 A	NC	NC	*
SW:RB14_RAT P35287 RAS-RELATED PROTEIN RAB-14. [1] ;													
Human class I histocompatibility antigen-like protein mRNA, complete cds.													
yf2ed08.s1 Homo sapiens cDNA clone 127983 3'	U22963_at	10 A	92 P	92 P	92 P	I	*	-6.1	1.63	19 A	19 A	NC	*
yf25g01.s1 Homo sapiens cDNA clone 140304 3'	RC_R09230_at	-52 A	88 P	88 P	88 P	I	*	-3.9	0.64	60 A	60 A	I	*
zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar	RC_R67918_at	-113 A	88 P	88 P	88 P	I	*	-5.2	0.94	14 A	14 A	NC	*
to TR:G397579 G397579 LL5 MRNA. ;	AA402119_at	-124 A	79 P	79 P	79 P	I	*	-10.4	1.13	-123 A	NC	NC	*
zn42g07.r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5'	AA082171_at	20 A	74 P	74 P	74 P	I	*	3.1	0.5	44 A	44 A	NC	*
yl89d09.r1 Homo sapiens cDNA clone 146417 5'	R79750_at	-14 A	70 P	70 P	70 P	I	*	-6.2	1.39	-7 A	NC	NC	*
zw80d04.s1 Soares testis NHT Homo sapiens cDNA clone 782503 3'	RC_AA431773_at	-24 A	68 P	68 P	68 P	I	*	-5.7	1	115 A	115 A	I	*
zs97a07.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711540 3'	RC_AA280670_at	20 A	66 P	66 P	66 P	I	*	3.4	0.57	4 A	NC	NC	*
EST16378 Aorta endothelial cells, TNF alpha-treated Homo sapiens cDNA 5' end.	AA303711_at	-72 A	61 P	61 P	61 P	I	*	-14.4	2.95	-123 A	NC	NC	*
zu64g03.r1 Soares testis NHT Homo sapiens cDNA clone 742804 5'	AA400361_at	-1 A	60 P	60 P	60 P	I	*	-4.8	0.91	23 A	23 A	NC	*
Homo sapiens MDM2-like p53-binding protein (MDMX) mRNA, complete cds.	AF007111_at	10 A	51 P	51 P	51 P	I	*	-5.2	1.21	-4 A	NC	NC	*
ea59c02.r1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825218 5' similar to	AA504384_at	-23 A	43 P	43 P	43 P	I	*	-6.0	0.89	-39 A	NC	NC	*
contains element MIR repetitive element ;													
K1565F Felal heart, Lambda ZAP Express Homo sapiens cDNA clone K1565 5'	N88108_at	-24 A	25 P	25 P	25 P	I	*	-6.0	0.84	-8 A	NC	NC	*
similar to EST(YD54C09.R1).													
aa20e01.s1 Soares NhMIPu S1 Homo sapiens cDNA clone 813816 3'	RC_AA44769_at	-18 A	-158 P	-158 P	-158 P	I	*	-11.1	3.85	-159 A	NC	NC	*

Fig. 16.5

## EST Bladder candidates of 17742 ESTs

Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*

2424 genes with sort score &gt;= +/- 0.5 changing from N to tumor.

39 genes in Tagli only, Abs calls APAAA and INCREASED

sorted acc. To Avg Diff Tagli

gene name	Fold Change T1glllP(vs)N	Sort Score T1glllP(vs)N	Avg Diff T2glllmlxP	Abs Call T2glllmlxP	Diff Call T2glllmlxP(vs)N	B=A	Fold Change T2glllmlxP(vs)N	Sort Score T2glllmlxP(vs)N	Avg Diff T2glllmlxP	Abs Call T2glllmlxP	Diff Call T2glllmlxP(vs)N	B=A	Fold Change T2glllmlxP(vs)N	Sort Score T2glllmlxP(vs)N	Avg Diff T2glllmlxP	Abs Call T2glllmlxP	Diff Call T2glllmlxP(vs)N	B=A
zn53e03.s1 Stralagene muscle 937209 Homo sapiens cDNA clone 561916 3'.	1,9	0,21	49 A	NC *	NC *	~1,6	~2,6	0,08	101 A	NC *	NC *	~1,6	0,08	0,22	87 A	NC *	NC *	~1,6
ze55c07.r1 Soares retina N2b4HR Homo sapiens cDNA clone 362892 5' similar to SW:RB14_RAT P35287 RAS-RELATED PROTEIN RAB-14. [1].	~1,0	0	46 A	NC *	NC *	~2,3	~2,3	0,08	111 A	NC *	NC *	~2,3	0,08	0,26	99 A	NC *	NC *	~2,3
Human class I histocompatibility antigen-like protein mRNA, complete cds.	~1,4	0,02	63 A	NC *	NC *	~1,8	~1,8	0,08	111 A	NC *	NC *	~1,8	0,08	0,26	99 A	NC *	NC *	~1,8
Yf26d08.s1 Homo sapiens cDNA clone 127983 3'.	~3,3	0,33	4 A	NC *	NC *	~3,1	~3,1	0,26	99 A	NC *	NC *	~3,1	0,26	0,22	-115 A	NC *	NC *	~3,1
Yf25g01.s1 Homo sapiens cDNA clone 140304 3'.	~3,6	0,29	16 A	NC *	NC *	~3,5	~3,5	0,22	-115 A	NC *	NC *	~3,5	0,22	0,24	-65 A	NC *	NC *	~3,5
zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA. ;	~1,0	0	49 A	NC *	NC *	~1,7	~1,7	0,05	-11 A	NC *	NC *	~1,7	0,05	0,24	-65 A	NC *	NC *	~1,7
zn42g07.r1 Stralagene endothelial cell 937223 Homo sapiens cDNA clone 550140 5'.	~2,1	0,12	45 A	NC *	NC *	~1,6	~1,6	0,05	45 A	NC *	NC *	~1,6	0,05	0,24	-65 A	NC *	NC *	~1,6
yi89d09.r1 Homo sapiens cDNA clone 146417 5'.	~2,0	0,07	68 A	NC *	NC *	~1,8	~1,8	0,05	-15 A	NC *	NC *	~1,8	0,05	0,24	-65 A	NC *	NC *	~1,8
zw80d04.s1 Soares testis NHT Homo sapiens cDNA clone 782503 3'.	~6,6	1,71	40 A	NC *	NC *	~2,4	~2,4	0,11	50 A	NC *	NC *	~2,4	0,11	0,24	-804 A	MD *	MD *	~2,4
zs97a07.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711540 3'.	~1,5	-0,02	18 A	NC *	NC *	~1,5	~1,5	0,03	-40 A	D *	D *	~1,5	0,03	0,24	-804 A	MD *	MD *	~1,5
EST16378 Aorta endothelial cells, TNF alpha-treated Homo sapiens cDNA 5' end.	~3,5	-0,18	-254 A	NC *	NC *	~7,0	~7,0	-0,53	-540 A	D *	D *	~7,0	-0,53	0,24	-804 A	MD *	MD *	~7,0
zu64g03.r1 Soares testis NHT Homo sapiens cDNA clone 742804 5'.	~1,7	0,04	4 A	NC *	NC *	~1,1	~1,1	0	-49 A	NC *	NC *	~1,1	0	0,24	-804 A	MD *	MD *	~1,1
Homo sapiens MIDM2-like p53-binding protein (MDMX) mRNA, complete cds.	~1,2	0,01	43 A	NC *	NC *	~2,0	~2,0	0,1	-7 A	NC *	NC *	~2,0	0,1	0,24	-804 A	MD *	MD *	~2,0
aa59c02.r1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825218 5' similar to contains element MIR repetitive element. ;	~1,8	-0,05	-39 A	NC *	NC *	~1,7	~1,7	-0,05	-11 A	NC *	NC *	~1,7	-0,05	0,24	-65 A	NC *	NC *	~1,7
K1555F Fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K1555 5' similar to EST(YD54C09.R1).	~2,5	0,1	34 A	I *	I *	~3,1	~3,1	0,24	-65 A	NC *	NC *	~3,1	0,24	0,24	-65 A	NC *	NC *	~3,1
aa20e01.s1 Soares NhtHMPu S1 Homo sapiens cDNA clone 813816 3'.	~4,4	0,64	-107 A	NC *	NC *	~5,7	~5,7	1,69	-804 A	MD *	MD *	~5,7	1,69	1,69	-804 A	MD *	MD *	~5,7

Fig. 16.6

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EST Bladder candidates of 17742 ESTs  
 Exclusion of data sets incl. AFFX, all NC, all A, 3xNC + M\*  
 2424 genes with sort score  $\geq \pm 0.5$  changing from N to tumor  
 39 genes in Tagl only, Abs calls APAAA and INCREASED  
 sorted acc. To Avg Diff Tagl

gene name	Fold Change T2gillsolidP(vs)N	Sort Score T2gillsolidP(vs)N	Abs Calls	N	Q	Q	Q	Q	Q
zn53e03.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 561916 3'.	1,6	0,09 APAAA	0	98	0	0	0	0	0
ze55c07.r1 Soares retina N2b4HR Homo sapiens cDNA clone 362892 5' similar to SW:RB14_RAT P35287 RAS-RELATED PROTEIN RAB-14. [1] ;	~1,4	0,03 APAAA	0	98	0	0	0	0	0
Human class I histocompatibility antigen-like protein mRNA, complete cds.	~3,5	-0,26 APAAA	0	92	0	0	0	0	0
yf26d08.s1 Homo sapiens cDNA clone 127983 3'.	~1,9	0,1 APAAA	0	88	0	0	0	0	0
yf25g01.s1 Homo sapiens cDNA clone 140304 3'.	~4,0	0,61 APAAA	0	88	0	0	0	0	0
zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to TR:G397579 G397579 LL5 MRNA. ;	~1,2	0,01 APAAA	0	79	0	0	0	0	0
zn42g07.r1 Stratagene endothelial cell 537223 Homo sapiens cDNA clone 550140 5'.	~1,3	0,02 APAAA	0	74	0	0	0	0	0
yi85d09.r1 Homo sapiens cDNA clone 146417 5'.	~1,9	0,08 APAAA	0	70	0	0	0	0	0
zw80d04.s1 Soares testis NHT Homo sapiens cDNA clone 782503 3'.	~3,7	0,83 APAAA	0	68	0	0	0	0	0
zs97a07.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711540 3'.	~2,3	-0,12 APAAA	0	66	0	0	0	0	0
EST16378 Aorta endothelial cells, TNF alpha-treated Homo sapiens cDNA 5' end.	~12,4	-1,1 APAAA	0	61	0	0	0	0	0
zu64g03.r1 Soares testis NHT Homo sapiens cDNA clone 742804 5'.	~2,2	-0,11 APAAA	0	60	0	0	0	0	0
Homo sapiens MDM2-like p53-binding protein (MDMX) mRNA, complete cds.	~1,1	0 APAAA	0	51	0	0	0	0	0
aa59g02.r1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825216 5' similar to contains element MIR repetitive element ;	~1,1	0,01 APAAA	0	43	0	0	0	0	0
K1565F Fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K1565 5' similar to EST(YD54C09.R1) ;	~1,7	-0,05 APAAA	0	25	0	0	0	0	0
aa20e01.s1 Soares NIHIMPu S1 Homo sapiens cDNA clone 813816 3'.	~11,5	-1,02 APAAA	0	168	0	0	0	0	0

Fig. 17.1

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Chip	Probe Set	Description	Normal Avg Diff	Abs Call
Increase in all subA	RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836.3'	36	A
subB	RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230.	-25	P
subB	RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	182	A
subB	RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.	110	A
Decrease in all subA	AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to .SW:CATX_BOVIN P05889 CATHEPSIN ;	284	P
subA	AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5' end.	3937	P
subA	AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to .contains element TAR1 repetitive element ;	288	P
subA	C01409_s_at	HUMGS0008391, Human Gene Signature, 3'-directed cDNA sequence.	673	P
subA	RC_AA256485_at	zr81e12.s1 Soares NhhMMPu S1 Homo sapiens cDNA clone 682126 3'.	2650	P
subA	RC_AA290679_at	zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to .TR:E92665 E92665 AP56 ;	1847	P
subA	RC_AA429665_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781539 3'.	803	P
subA	RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	380	P
subA	RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	1060	P
subA	RC_AA491463_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.	320	P
subB	RC_AA025434_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to .PIR:A48764 A48764 calpain ;	1291	P
subB	RC_AA026030_at	zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	1936	P
subB	RC_AA054321_s_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	808	P
subB	RC_AA099820_at	zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	277	P
subB	RC_AA161043_at	yl98f11.s1 Homo sapiens cDNA clone 46316 3'.	5134	P
subB	RC_AA215379_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.	1235	P
subB	RC_H09281_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb. J02982 GLYCOPHORIN B PRECURSOR (HUMAN);	1383	P
subB	RC_H18836_at	yr89e02.s1 Homo sapiens cDNA clone 212474 3'.	2471	P
subB	RC_H52937_at	yy20a05.s1 Homo sapiens cDNA clone 243248 3'.	1007	P
subB	RC_H69547_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	1865	P
subB	RC_H95039_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	1117	P
subB	RC_N21687_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.	1806	P
subB	RC_N54841_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	573	P
subB	RC_N59622_at		307	P
subB	RC_N66312_at		334	P
subB	RC_N90717_at		523	P
subB	RC_R22189_at		254	P

Fig. 17.2

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Chip	Probe Set	Description	Ta Abs Call Diff Call Fold Change Sort Score
Increase in all			
subA	RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.	P I 4,1 1,18
subB	RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230.	P I ~15.4 10,54
subB	RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	P I 2,9 1,25
subB	RC_Z40715_at	Hi. sapiens partial cDNA sequence; clone c-2ea12.	P I 3,3 1,31
Decrease in all			
subA	AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to .SW:CATX_BOVIN P05689 CATHEPSIN;	A D ~-18.4 -7,64
subA	AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5' end.	P D -71,4 -50,28
subA	AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to .contains element TAR1 repetitive element;	A D ~-18.1 -7,28
subA	C01409_s_at	HUMGS0008391, Human Gene Signature, 3'-directed cDNA sequence.	P D -4,5 -2,73
subA	RC_AA256485_at	zr81e12.s1 Soares NHMPu S1 Homo sapiens cDNA clone 682126 3'.	P D -11,7 -15,84
subA	RC_AA290679_at	zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to .TR:E92665 E92665 AP56;	P D -3 -2,39
subA	RC_AA296655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.	P D -4,9 -3,73
subA	RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	A D -3,3 -1,26
subA	RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	P D -3,3 -2,1
subA	RC_AA491463_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.	P D ~-16.4 -6,78
subB	RC_AA025434_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to .PIR:A48764 A48764 calpain;	A D ~-34.1 -23,95
subB	RC_AA026030_at	zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	A D -4,4 -4,64
subB	RC_AA054321_s_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	A D ~-18.7 -13,25
subB	RC_AA099820_at	zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	A D ~-6.5 -3,07
subB	RC_AA161043_at	y98f11.s1 Homo sapiens cDNA clone 46316 3'.	P D -2,6 -3,13
subB	RC_AA215379_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.	P D -5,2 -5,56
subB	RC_H09281_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb.	P D -2,3 -1,15
subB	RC_H18836_at	J02982 GLYCOPHORIN B PRECURSOR (HUMAN);	P D -1,9 -1,04
subB	RC_H52937_at	yr69e02.s1 Homo sapiens cDNA clone 212474 3'.	A D ~-15.2 -10,7
subB	RC_H69547_at	yv20a05.s1 Homo sapiens cDNA clone 243248 3'.	A D -3,6 -3,44
subB	RC_H95039_at	yv20a05.s1 Homo sapiens cDNA clone 243248 3'.	P D -2,7 -1,59
subB	RC_N21887_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	P D -2,5 -1,48
subB	RC_N54841_at		P D -8,2 -5,75
subB	RC_N59622_at		A D ~-6.1 -2,22
subB	RC_N66312_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	A D ~-7.7 -4,23
subB	RC_N90717_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.	A D ~-15.5 -9,87
subB	RC_R22189_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	A D ~-7.6 -4,14

Fig. 17.3

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Chip	Probe Set	Description	T1 Abs Call	Diff Call	Fold Change	Sort Score
Increase in all subA	RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.	P	I	9.9	5.39
subB	RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230.	P	I	-10.6	6.44
subB	RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	P	I	4.7	3.64
subB	RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.	P	I	5	3.12
Decrease in all subA	AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to .SW:CATX_BOVIN P05689 CATHEPSIN ;	A	D	-10.1	-4.9
subA	AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5' end.	A	D	~-195.5	-65.13
subA	AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to .contains element TAR1 repetitive element ;	A	D	~-13.6	-5.92
subA	C01409_s_at	HUMGS0008391, Human Gene Signature, 3'-directed cDNA sequence.	P	D	-3.2	-1.57
subA	RC_AA256485_at	zr81e12.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 682126 3'.	P	D	-6.9	-9.68
subA	RC_AA290679_at	z19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to .TR:E92665 E92665 AP56 ;	P	D	-2.5	-1.66
subA	RC_AA429655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.	P	D	-3.6	-2.25
subA	RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	A	D	-4.2	-1.92
subA	RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	P	D	-8.6	-7.78
subA	RC_AA491463_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.	A	D	~-14.2	-6.24
subB	RC_AA025434_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to .PIR:A48764 A48764 calpain ;	A	D	~-41.4	-27.96
subB	RC_AA026030_at	zf68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	M	D	-6.4	-7.7
subB	RC_AA054321_s_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	A	D	-12.2	-9.67
subB	RC_AA099820_at	zr97c07.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	A	D	~-7.2	-3.44
subB	RC_AA161043_at	y198f11.s1 Homo sapiens cDNA clone 46316 3'.	P	D	-5.5	-10.7
subB	RC_AA215379_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.	P	D	-9.3	-10.6
subB	RC_H09281_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb. J02982 GLYCOPHORIN B PRECURSOR (HUMAN);	P	D	-4.9	-4.81
subB	RC_H18836_at	yf89e02.s1 Homo sapiens cDNA clone 212474 3'.	P	D	-2.1	-1.24
subB	RC_H52937_at	yv20a05.s1 Homo sapiens cDNA clone 243248 3'.	A	D	-6.7	-5.22
subB	RC_H69547_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	A	D	-3.5	-3.31
subB	RC_H95039_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	P	D	-4.5	-3.99
subB	RC_N21687_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.	P	D	-3.2	-2.61
subB	RC_N54841_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	P	D	-3.3	-1.66
subB	RC_N59622_at		A	D	~-5.4	-1.9
subB	RC_N66312_at		A	D	~-10.2	-5.66
subB	RC_N90717_at		A	D	~-20.3	-12.5
subB	RC_R22189_at		A	D	~-8.1	-4.39



Fig. 17.4

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Chlp	Probe Set	Description	T2 Mix Abs Call Diff Call Fold Change Sort Score
Increase in all			
subA	RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.	P I 10.8 6.06
subB	RC_AA101562_at	zn76c11.s1 Stratagene NT2 neuronal precursor 937230 .	P I ~8.3 4.51
subB	RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	P I 4.2 2.85
subB	RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.	P I 13.6 14.22
Decrease in all			
subA	AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to .SW:CATX_BOVIN P05689 CATHEPSIN ;	A D ~9.9 -4.84
subA	AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5' end.	A D -114.8 -57.37
subA	AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to .contains element TAR1 repetitive element ;	P D -4 -1.35
subA	C01409_s_at	HUMGS0008391, Human Gene Signature, 3'-directed cDNA sequence.	A D -4.5 -2.71
subA	RC_AA256485_at	zr81e12.s1 Soares NIHMPu S1 Homo sapiens cDNA clone 682126 3'.	P D -4.4 -5.34
subA	RC_AA290679_at	z19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to .TR:E92665 E92665 AP56 ;	P D -5.3 -6.32
subA	RC_AA429655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.	P D -3.9 -2.56
subA	RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	A D -4.3 -1.98
subA	RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	P D -3.1 -1.86
subA	RC_AA491463_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.	A D ~12.1 -6.05
subB	RC_AA025434_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to .PIR:A48764 A48764 calpain ;	A D ~29.6 -23.21
subB	RC_AA026030_at	z168c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	A D -11.8 -13.8
subB	RC_AA054321_s_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	A D ~19.3 -14.36
subB	RC_AA099820_at	zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	A D -5.1 -2.44
subB	RC_AA161043_at	y198f11.s1 Homo sapiens cDNA clone 46316 3'.	P D -5.6 -10.78
subB	RC_AA215379_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.	P D -3.9 -3.6
subB	RC_H09281_at	yq76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb: J02982 GLYPHOPHORIN B PRECURSOR (HUMAN);	P D -16.6 -15.67
subB	RC_H18836_at	yr89e02.s1 Homo sapiens cDNA clone 212474 3'.	P D -2.4 -1.89
subB	RC_H52937_at	yw20a05.s1 Homo sapiens cDNA clone 243248 3'.	A D -5.3 -3.93
subB	RC_H69547_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	A D -6.1 -7.55
subB	RC_H95039_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	P D -5.3 -4.9
subB	RC_N21687_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.	P D -3.4 -2.88
subB	RC_N54841_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	P D -4.2 -2.48
subB	RC_N59622_at		A D -3.3 -1.11
subB	RC_N66312_at		A D ~7.3 -3.99
subB	RC_N90717_at		A D ~14.7 -9.64
subB	RC_R22189_at		A D ~6.1 -3.21

Fig. 17.5

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Chip	Probe Set	Description	T2 Solid Abs Call	Diff Call	Fold Change	Sort Score
<b>Increase in all</b>						
subA	RC_AA116036_at	zm79a11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 531836 3'.	P	I	-9.4	5.32
subB	RC_AA101562_at	zm76c11.s1 Stratagene NT2 neuronal precursor 937230 .	P	I	-8.9	6.05
subB	RC_H20269_at	yn53b04.s1 Homo sapiens cDNA clone 172111 3'.	P	I	4.7	3.57
subB	RC_Z40715_at	H. sapiens partial cDNA sequence; clone c-2ea12.	P	I	16.2	17.52
<b>Decrease in all</b>						
subA	AA131127_at	zo16a05.r1 Stratagene colon (#937204) Homo sapiens cDNA clone 587024 5' similar to .SW:CATX_BOVIN P05689 CATHEPSIN ;	A	D	-10.6	-5.5
subA	AA372630_s_at	EST84548 Colon adenocarcinoma IV Homo sapiens cDNA 5' end.	P	D	-11.6	-20.55
subA	AA434329_at	zw24g07.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770268 5' similar to . contains element TAR1 repetitive element ;	A	D	-7.7	-3.84
subA	C01409_s_at	HUMGS0008391. Human Gene Signature, 3'-directed cDNA sequence.	P	D	-3	-1.32
subA	RC_AA256485_at	zr81e12.s1 Soares Nhl-MPp S1 Homo sapiens cDNA clone 682126 3'.	P	D	-7.4	-10.4
subA	RC_AA290679_at	zt19f03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 713597 3' similar to . TR:E92665 E92665 AP56 ;	P	D	-2.4	-1.52
subA	RC_AA429655_at	zw71d04.s1 Soares testis NHT Homo sapiens cDNA clone 781639 3'.	P	D	-3.1	-1.77
subA	RC_AA452410_at	zx31f03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788093 3'.	A	D	-3	-1.12
subA	RC_AA461174_at	zx70c04.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796806 3'.	P	D	-7.9	-7.15
subA	RC_AA491463_at	ze84f10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365707 3'.	P	D	-8.3	-4.25
subB	RC_AA025434_at	ze84d01.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 365665 3' similar to . PIR:A48764 A48764 calpain ;	A	D	-27.8	-23
subB	RC_AA026030_at	zl68c01.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 509760 3'.	M	D	-5.3	-6.15
subB	RC_AA054321_s_at	zk87c05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489800 3'.	A	D	-17.5	-13.53
subB	RC_AA099820_at	zr97c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683628 3'.	A	D	-6.0	-2.91
subB	RC_AA161043_at	yl98f11.s1 Homo sapiens cDNA clone 46316 3'.	P	D	-2.5	-2.61
subB	RC_AA215379_at	ym45d10.s1 Homo sapiens cDNA clone 51262 3'.	P	D	-2.5	-1.52
subB	RC_H09281_at	yy76e12.s1 Homo sapiens cDNA clone 201742 3' similar to gb. J02982 GLYCOPHORIN B PRECURSOR (HUMAN);	P	D	-6.2	-6.55
subB	RC_H18836_at	yr89e02.s1 Homo sapiens cDNA clone 212474 3'.	P	D	-3.5	-4.38
subB	RC_H52937_at	yy20a05.s1 Homo sapiens cDNA clone 243248 3'.	A	D	-7.3	-5.67
subB	RC_H69547_at	yx63h03.s1 Soares melanocyte 2NbHM Homo sapiens cDNA clone 266453 3'.	A	D	-4.4	-4.88
subB	RC_H95039_at	yz38a06.s1 Homo sapiens cDNA clone 285298 3'.	P	D	-3.6	-2.75
subB	RC_N21687_at	za90a10.s1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299802 3'.	A	D	-5.2	-5.7
subB	RC_N54841_at	yh26a02.s1 Homo sapiens cDNA clone 130826 3'.	P	D	-5	-3.22
subB	RC_N59622_at		P	D	-3.7	-1.36
subB	RC_N66312_at		P	D	-5.5	-2.13
subB	RC_N90717_at		A	D	-13.3	-9.66
subB	RC_R22189_at		A	D	-7.9	-4.21

Fig. 17.6

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Chip	Probe Set	Description	Normal Avg Diff	Abs Call
Decrease in all				
subB	RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	813	P
subB	RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.	6706	P
subB	RC_W86375_s_at	H. sapiens partial cDNA sequence; clone c-05e04.	2209	P
subB	RC_Z38289_at		1217	P
Increase in Ta				
subA	AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to ,TR:G397579 G397579 LL5 MRNA, ;	-124	A
subA	RC_AA102581_at	ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	-75	A
subB	RC_H14089_at	yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	42	A
subB	RC_R46079_f_at	y25g01.s1 Homo sapiens cDNA clone 140304 3'.	-42	A
subB	RC_R67918_at	similar to ,PIR:S39983 S39983 eps8 protein - mouse ;	-113	A
subB	RC_W15360_at		-43	A
subA	AA082171_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.	20	A
subA	AA425593_at	H. sapiens partial cDNA sequence,	75	A
subA	F15201_at	ym30f02.r1 Homo sapiens cDNA clone 49693 5'.	30	A
subA	H15219_at	yh04b02.r1 Homo sapiens cDNA clone 42052 5'.	28	A
subA	R60368_at	ym86a02.r1 Homo sapiens cDNA clone 165770 5'.	147	P
subA	R66859_at	zk59g01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3'.	106	P
subA	RC_AA045342_at	zc98g05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3'.	56	A
subA	RC_AA171985_at	yc04e08.r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element.	76	P
subA	T63174_s_at	Human Krt11 mRNA, complete cds,	211	P
subA	U90268_at	Human mRNA for thrombospondin	21	P
subA	X14787_at	Human mRNA for thrombospondin	20	P
subB	RC_AA196991_s_at	zq10a10.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to ,TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, H. sapiens partial cDNA sequence; clone c-10c01, H. sapiens partial cDNA sequence; clone c-2uc10, H. sapiens partial cDNA sequence; clone c-49795 3', ym30c10.s1 Homo sapiens cDNA clone 49795 3', yo44d04.s1 Homo sapiens cDNA clone 180775 3', yf45a10.s2 Homo sapiens cDNA clone 129786 3', yf46b01.s1 Homo sapiens cDNA clone 35626 3'.	50	A
subB	RC_F02470_at		162	A
subB	RC_F08899_at		146	P
subB	RC_H15259_at		50	A
subB	RC_H52133_at		252	A
subB	RC_R17059_at		140	A
subB	RC_R45292_at		148	A
Increase in T1				
subA	C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,	47	M
subA	D80002_at	Human mRNA for KIAA0180 gene, partial cds	-197	A
subA	RC_AA149586_at	z139e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3'.	-30	P

Fig. 17.7

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Chip	Probe Set	Description	Ta Abs Call	Diff Call	Fold Change	Sort Score
Decrease in all						
subB	RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	A	D	-12	-9.55
subB	RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.	P	D	-12,6	-25,85
subB	RC_W86375_s_at	H. sapiens partial cDNA sequence; clone c-05e04.	P	D	-7,5	-10,36
subB	RC_Z38289_at		P	D	-2,5	-1,26
Increase in Ta						
subA	AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to ,TR:G397579 G397579 LL5 MRNA, ;	P	I	~10,4	1,13
subA	RC_AA102581_at					
subB	RC_H14089_at	ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	P	I	~21,4	8,48
subB	RC_R46079_f_at	yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	P	I	~5,0	2
subB	RC_R67918_at	yi25g01.s1 Homo sapiens cDNA clone 140304 3'.	P	I	~6,2	2,41
subB	RC_W15360_at		P	I	~5,2	0,94
subA	AA082171_at	similar to ,PIR:S39983 S39983 eps8 protein - mouse ;	P	I	~6,1	2,32
subA	AA425593_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.	P	I	3,1	0,5
subA	F15201_at	H. sapiens partial cDNA sequence.	P	I	3,8	1,47
subA	H15219_at	ym30f02.r1 Homo sapiens cDNA clone 49693 5'.	P	I	4	1,05
subA	R60368_at	yh04b02.r1 Homo sapiens cDNA clone 42052 5'.	P	I	3,2	0,63
subA	R86859_at	ym86a02.r1 Homo sapiens cDNA clone 165770 5'.	P	I	3	1,19
subA	RC_AA045342_at	zik59g01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3'.	P	I	3,7	1,63
subA	RC_AA171985_at	zo98g05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3'.	P	I	3,5	0,82
subA	T63174_s_at	yc04e08.r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element;	P	I	3,1	0,96
subA	U90268_at	Human Krt11 mRNA, complete cds.	P	I	3	1,46
subA	X14787_at	Human mRNA for thrombospondin	P	I	7	2,46
subB	RC_AA196991_s_at	Zq10a10.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to ; TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN, H. sapiens partial cDNA sequence; clone c-10c01.	P	I	5,8	1,76
subB	RC_F02470_at		P	I	3,3	0,89
subB	RC_F08899_at	H. sapiens partial cDNA sequence; clone c-2uc10.				
subB	RC_H15259_at	ym30c10.s1 Homo sapiens cDNA clone 49795 3'.	P	I	6	5,38
subB	RC_H52133_at	yo44d04.s1 Homo sapiens cDNA clone 180775 3'.	P	I	3,9	1,91
subB	RC_R17059_at	yf45a10.s2 Homo sapiens cDNA clone 129786 3'.	P	I	8,6	5,21
subB	RC_R45292_at	yg46b01.s1 Homo sapiens cDNA clone 35626 3'.	P	I	3,9	2,95
Increase in T1						
subA	C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence.	A	NC	-1,7	-0,1
subA	D80002_at	Human mRNA for KIAA0180 gene, partial cds	A	NC	~27,5	1,55
subA	RC_AA149586_at	zi39e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3'.	P	NC	2,5	0,34

Fig. 17.8

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Chip	Probe Set	Description	T1 Abs Call	Diff Call	Fold Change	Sort Score
Decrease in all						
subB	RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 39835 3'.	A	D	~19.5	-13.74
subB	RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.	P	D	-12	-24.78
subB	RC_W86375_s_at	H. sapiens partial cDNA sequence; clone c-05e04.	P	D	-5	-6.3
subB	RC_Z38289_at		P	D	-4.7	-3.96
Increase in Ta						
subA	AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to ,TR:G397579 G397579 LL5 MRNA, ;	A	NC	~1.0	0
subA	RC_AA102581_at					
subB	RC_H14089_at	ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	A	NC	4.4	1.31
subB	RC_R46079_f_at	yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	A	NC	~2.7	-0.47
subB	RC_R67918_at	yz25g01.s1 Homo sapiens cDNA clone 140304 3'.	A	NC	~1.9	-0.08
subB	RC_W15360_at	similar to ,PIR:S39983 S39983 eps8 protein - mouse ;	A	NC	~3.6	0.29
subA	AA082171_at				~4.1	0.85
subA	AA425593_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.	A	NC	~2.1	0.12
subA	F15201_at	H. sapiens partial cDNA sequence.	A	NC	-2.5	-0.33
subA	H15219_at	ym30f02.r1 Homo sapiens cDNA clone 49693 5'.	A	NC	~1.9	-0.06
subA	R60368_at	ym04b02.r1 Homo sapiens cDNA clone 42052 5'.	P	NC	1.8	0.1
subA	R8859_at	ym86a02.r1 Homo sapiens cDNA clone 165770 5'.	P	NC	1.2	0.03
subA	RC_AA045342_at	zk59g01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3'.	P	NC	1.5	0.12
subA	RC_AA171985_at	zo98g05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3'.	P	NC	2	0.17
subA	T63174_s_at	yc04e08.r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element.	P	NC	1.3	0.03
subA	U90268_at	Human Krt1 mRNA, complete cds.			1.8	0.33
subA	X14787_at	Human mRNA for thrombospondin	A	NC	1.2	0.02
subB	RC_AA196991_s_at	zq10a10.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to ,TR:G1049074 G1049074	A	NC	1.9	0.11
		VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN.	P	NC	2.8	0.56
subB	RC_F02470_at	H. sapiens partial cDNA sequence; clone c-10c01.	A	NC	2	0.38
subB	RC_F08899_at	H. sapiens partial cDNA sequence; clone c-2uc10.	P	NC	1.9	0.29
subB	RC_H15259_at	ym30c10.s1 Homo sapiens cDNA clone 49795 3'.	A	NC	3.1	0.73
subB	RC_H52133_at	yo44d04.s1 Homo sapiens cDNA clone 180775 3'.	M	NC	2.4	0.81
subB	RC_R17059_at	yf45a10.s2 Homo sapiens cDNA clone 129786 3'.	A	NC	1.8	0.23
subB	RC_R45292_at	yg46b01.s1 Homo sapiens cDNA clone 35626 3'.	A	NC	1.4	0.08
Increase in T1						
subA	C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence.	P	I	~18.6	8.71
subA	D80002_at	Human mRNA for KIAA0180 gene, partial cds	P	I	~14.9	0.91
subA	RC_AA149586_at	zl39e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3'.	P	I	~9.3	3.16

Fig. 17.9

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Chip	Probe Set	Description	T2 Mix Abs Call	Diff Call	Fold Change	Sort Score
Decrease in all						
subB	RC_R53457_at	yg83e10.s1 Homo sapiens cDNA clone 398333'	A	D	~15.5	-11,89
subB	RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 687673'	P	D	-8,6	-18,63
subB	RC_W86375_s_at	H. sapiens partial cDNA sequence; clone c-05e04.	A	D	-26,9	-22,82
subB	RC_Z38289_at		A	D	-7,3	-6,96
Increase in Ta						
subA	AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 7418955' similar to ,TR:G397579 G397579 LL5 MRNA, ;	A	NC	~3,5	0,22
subA	RC_AA102581_at	ym62c07.s1 Homo sapiens cDNA clone 1635003'	P	NC	4,1	1,33
subB	RC_H14089_at	yg49c02.s1 Homo sapiens cDNA clone 361333'	A	NC	~2,3	-0,15
subB	RC_R46079_f_at	yz25g01.s1 Homo sapiens cDNA clone 1403043'	A	NC	~3,6	0,64
subB	RC_R67918_at		A	NC	~3,1	0,26
subB	RC_W15360_at	similar to ,PIR:S39983 S39983 eps8 protein - mouse ;	A	NC	~2,4	0,16
subA	AA082171_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 7733075', H. sapiens partial cDNA sequence,	A	NC	~1,6	0,05
subA	AA425593_at		A	NC	3,8	1,46
subA	F15201_at	ym30f02.r1 Homo sapiens cDNA clone 496935',	A	NC	~1,1	0
subA	H15219_at	yh04b02.r1 Homo sapiens cDNA clone 420525',	A	NC	~1,2	-0,01
subA	R60368_at	ym86a02.r1 Homo sapiens cDNA clone 1657705',	P	NC	-1,1	-0,02
subA	R86859_at	zk59g01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 4871523',	A	NC	1,5	0,1
subA	RC_AA045342_at	zo98g05.s1 Stratagene ovarian.cancer (#937219) Homo sapiens cDNA clone 5949683',	P	NC	2,3	0,29
subA	RC_AA171985_at		P	NC	-1,2	-0,02
subA	T63174_s_at	yc04e08.r1 Homo sapiens cDNA clone 797185' similar to contains Alu repetitive element;	P	NC	1,4	0,08
subA	U90268_at	Human Krt1 mRNA, complete cds,	P	NC	~2,6	0,32
subA	X14787_at	Human mRNA for thrombospondin	P	NC	~1,7	0,06
subB	RC_AA196991_s_at	zq10a10.s1 Stratagene muscle 937209 Homo sapiens cDNA clone 6292743' similar to ,TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN,	P	NC	~2,9	0,66
subB	RC_F02470_at	H. sapiens partial cDNA sequence; clone c-10c01,	A	NC	3,1	1,33
subB	RC_F08899_at	H. sapiens partial cDNA sequence; clone c-2uc10,	A	NC	1,1	0
subB	RC_H15259_at	ym30c10.s1 Homo sapiens cDNA clone 497953',	A	NC	~1,1	0
subB	RC_H52133_at	yo44d04.s1 Homo sapiens cDNA clone 1807753',	A	NC	2	0,48
subB	RC_R17059_at	yf45a10.s2 Homo sapiens cDNA clone 1297863',	A	NC	1,7	0,2
subB	RC_R45292_at	yg46b01.s1 Homo sapiens cDNA clone 356263',	A	NC	1,7	0,21
Increase in T1						
subA	C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence,	A	NC	~3,8	-0,4
subA	D80002_at	Human mRNA for KIAA0180 gene, partial cds	A	NC	-5,0	0,35
subA	RC_AA149586_at	zi39e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 5043163',	P	NC	~3,8	0,95

Fig. 17.10

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Chip	Probe Set	Description	T2 Solid Abs Call	Diff Call	Fold Change	Sort Score
Decrease in all						
subB	RC_R53457_at	y983e10.s1 Homo sapiens cDNA clone 39835 3'.	A	D	-10.4	-8.56
subB	RC_T53389_s_at	ya88f04.s1 Homo sapiens cDNA clone 68767 3'.	P	D	-9.1	-19.58
subB	RC_W86375_s_at	H. sapiens partial cDNA sequence; clone c-05e04.	A	D	-13.9	-17.47
subB	RC_Z38289_at		A	D	-18.6	-15.52
Increase in Ta						
subA	AA402119_at	zu55d04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741895 5' similar to ,TR:G397579 G397579 LL5 MRNA, ;	A	NC	-1.2	0.01
subA	RC_AA102581_at		A	NC	-2.3	0.26
subB	RC_H14089_at	ym62c07.s1 Homo sapiens cDNA clone 163500 3'.	A	NC	-1.7	-0.13
subB	RC_R46079_f_at	yg49c02.s1 Homo sapiens cDNA clone 36133 3'.	A	NC	-1.4	-0.04
subB	RC_R67918_at	yf25g01.s1 Homo sapiens cDNA clone 140304 3'.	A	NC	-4.0	0.61
subB	RC_W15360_at	similar to ,PIR:S39983 S39983 eps8 protein - mouse ;	A	NC	-1.6	0.05
subA	AA082171_at		A	NC	-1.3	0.02
subA	AA425593_at	zw48f02.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 773307 5'.	A	NC	-2.4	-0.43
subA	F15201_at	H. sapiens partial cDNA sequence.	A	NC	-1.9	0.15
subA	H15219_at	ym30f02.r1 Homo sapiens cDNA clone 49693 5'.	A	NC	-1.9	0.13
subA	R60368_at	yh04b02.r1 Homo sapiens cDNA clone 42052 5'.	A	NC	-1.9	-0.3
subA	R6859_at	ym86a02.r1 Homo sapiens cDNA clone 165770 5'.	P	NC	-3.3	0.71
subA	RC_AA045342_at	zk59g01.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 487152 3'.	A	NC	1.3	0.03
subA	RC_AA171985_at	zo98g05.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 594968 3'.	P	NC	-1.1	-0.01
subA	T63174_s_at	yc04e08.r1 Homo sapiens cDNA clone 79718 5' similar to contains Alu repetitive element.	P	NC	1.9	0.35
subA	U90268_at	Human Krt11 mRNA, complete cds.	P	NC	3.2	0.91
subA	X14787_at	Human mRNA for thrombospondin	P	NC	-1.1	0.01
subB	RC_AA196991_s_at	zq10a10.s1 Siratagene muscle 937209 Homo sapiens cDNA clone 629274 3' similar to ,TR:G1049074 G1049074 VASOPRESSIN-ACTIVATED CALCIUM-MOBILIZING PROTEIN.	P	NC	-1.8	0.14
subB	RC_F02470_at	H. sapiens partial cDNA sequence; clone c-10c01.	A	NC	2.8	1.03
subB	RC_F08899_at	H. sapiens partial cDNA sequence; clone c-2uc10.	P	NC	1.9	0.29
subB	RC_H15259_at	ym30c10.s1 Homo sapiens cDNA clone 49795 3'.	A	NC	-1.7	-0.08
subB	RC_H52133_at	yo44d04.s1 Homo sapiens cDNA clone 180775 3'.	A	NC	3.5	2.34
subB	RC_R17059_at	yf45a10.s2 Homo sapiens cDNA clone 129786 3'.	A	NC	-1.7	-0.07
subB	RC_R45292_at	y946b01.s1 Homo sapiens cDNA clone 35626 3'.	A	NC	-2.6	-0.62
Increase in T1						
subA	C01360_at	HUMGS0008341, Human Gene Signature, 3'-directed cDNA sequence.	A	NC	-4.0	-0.37
subA	D80002_at	Human mRNA for KIAA0180 gene, partial cds	A	NC	-3.8	0.29
subA	RC_AA149586_at	zl39e03.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504316 3'.	P	NC	-2.1	0.1

Fig. 17.11

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Chip	Probe Set	Description	Normal Avg Diff	Abs Call
Increase In T1				
subB	RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',	-98	A
subB	RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',	120	A
subB	RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',	-255	A
subB	RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;	28	A
subB	RC_R46206_at	yf53d08,s1 Homo sapiens cDNA clone 152463 3',	71	A
subB	RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38554 3',	30	A
subA	AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',	14	A
subA	AB002346_at	Human mRNA for KIAA0348 gene, complete cds,	37	A
subA	D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,	32	A
subA	M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds	90	M
subA	N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',	28	A
subA	RC_AA149044_at	z145d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',	21	A
subA	RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',	87	P
subA	RC_AA281743_r_at	z106h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',	20	A
subA	RC_AA406338_at	zv10f06,s1 Soares NIH-HMPu S1 Homo sapiens cDNA clone 753251 3',	67	A
subA	RC_AA424524_at	zv90g02,s1 Soares NIH-HMPu S1 Homo sapiens cDNA clone 767090 3',	23	A
subA	RC_AA435840_at	z180b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',	51	P
subB	RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',	50	A
subB	RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone 547660 3',	79	A
subB	RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',	106	A
subB	RC_AA148923_at	z127g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',	86	A
subB	RC_H98553_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',	86	P
subB	RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',	81	P
subB	RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',	65	A
subB	RC_T90374_at	RETROVIRUS-RELATED POL POLYPROTEIN ; H, sapiens partial cDNA sequence; clone c-02a08,	337	A
subB	RC_Z38182_at		84	A
Increase In T2 mix				
subA	RC_AA054726_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',	2	A
subB	RC_AA206042_at	similar to contains element MSR1 repetitive element ;	-730	A
subB	RC_R98735_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',	-1040	A
subA	AA115572_s_at	z105d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to, TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN ; PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',	52	A
subA	AA430979_at		56	P
subA	AA489287_at		33	A



Fig. 17.12

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Chip	Probe Set	Description	Ta			
			Abs Call	Diff Call	Fold Change	Sort Score
Increase in T1						
subB	RC_H68772_at	yr63f01.s1 Homo sapiens cDNA clone 211897 3',	A	NC	~1,2	-0,01
subB	RC_N30806_at	yw65f02.s1 Homo sapiens cDNA clone 257115 3',	A	NC	~1,1	0
subB	RC_N63143_at	yz37c12.s1 Homo sapiens cDNA clone 285238 3',	A	NC	~3,9	0,32
subB	RC_R33146_at	yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;	A	NC	~1,0	0
subB	RC_R46206_at	yf53d08.s1 Homo sapiens cDNA clone 152463 3',	A	NC	1,2	0,02
subB	RC_R49731_s_at	yg71e10.s1 Homo sapiens cDNA clone 38554 3',	A	NC	~1,5	-0,04
subA	AA043223_at	zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',	A	NC	~1,4	0,02
subA	AB002346_at	Human mRNA for KIAA0348 gene, complete cds,	P	NC	2,2	0,23
subA	D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,	P	NC	1,5	0,05
subA	IM83670_s_at	Human carbonic anhydrase IV mRNA, complete cds	P	NC	1,2	0,02
subA	N28843_at	yx58d10.r1 Homo sapiens cDNA clone 266035 5',	A	NC	3,1	0,57
subA	RC_AA149044_at	zi45d09.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',	A	NC	2,8	0,39
subA	RC_AA258130_at	zs35f03.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',	A	NC	-1,1	-0,01
subA	RC_AA281743_r_at	zi06h05.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',	A	NC	~1,2	-0,01
subA	RC_AA406338_at	zv10f06.s1 Soares NHHMPu S1 Homo sapiens cDNA clone 753251 3',	P	NC	1,2	0,02
subA	RC_AA424524_at	zv90g02.s1 Soares NHHMPu S1 Homo sapiens cDNA clone 767090 3',	A	NC	1,1	0
subA	RC_AA435840_at	zi80b08.s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',	P	NC	1,6	0,1
subB	RC_AA027823_at	zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',	A	NC	1,4	0,04
subB	RC_AA084138_at	zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',	A	NC	1,1	0
subB	RC_AA135406_at	zo28e08.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',	P	NC	1,9	0,26
subB	RC_AA148923_at	zi27g11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',	P	NC	2,5	0,55
subB	RC_H98653_at	yx12h06.s1 Homo sapiens cDNA clone 261563 3',	M	NC	1,7	0,13
subB	RC_N30077_at	yw81g11.s1 Homo sapiens cDNA clone 258692 3',	A	NC	1,1	0,01
subB	RC_R40166_at	yf70a09.s1 Homo sapiens cDNA clone 27448 3',	A	NC	1,1	0
subB	RC_T90374_at	RETROVIRUS-RELATED POL POLYPROTEIN ; H, sapiens partial cDNA sequence; clone c-02a08,	P	NC	1,1	0,01
subB	RC_Z38182_at	zk68e06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',	A	NC	2,1	0,33
Increase in T2 mix						
subA	RC_AA054726_at	similar to contains element MSR1 repetitive element ;	A	NC	-2,1	0,08
subB	RC_AA206042_at	yr31g12.s1 Homo sapiens cDNA clone 206950 3',	A	NC	~7,1	0,68
subB	RC_R98735_at	zi05d11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to ,TR:G895845 G895845	A	NC	~13,5	8,2
subA	AA115572_s_at	PUTATIVE P64 CLCP PROTEIN, ; PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',	A	NC	1,1	0
subA	AA430979_at		P	NC	1,7	0,12
subA	AA489287_at		A	NC	3	0,58

Fig. 17.13

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Chip	Probe Set	Description	T1 Abs Call	Diff Call	Fold Change	Sort Score
Increase in T1						
subB	RC_H68772_at	yr83f01.s1 Homo sapiens cDNA clone 211897 3',	P	I	~3.8	0.31
subB	RC_N30806_at	yw65f02.s1 Homo sapiens cDNA clone 257115 3',	P	I	~8.0	4.52
subB	RC_N63143_at	yz37c12.s1 Homo sapiens cDNA clone 285238 3',	P	I	~4.0	0.34
subB	RC_R33146_at	yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;	P	I	~20.4	14.82
subB	RC_R46206_at	yj53d08.s1 Homo sapiens cDNA clone 152463 3',	P	I	~3.6	0.9
subB	RC_R49731_s_at	yg71e10.s1 Homo sapiens cDNA clone 38554 3',	P	I	~8.2	4.7
subA	AA043223_at	zk55g12.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',	P	I	3.1	0.56
subA	AB002346_at	Human mRNA for KIAA0348 gene, complete cds,	P	I	3.3	0.73
subA	D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,	P	I	9.3	4.67
subA	IM83670_s_at	Human carbonic anhydrase IV mRNA, complete cds	P	I	3.2	1.09
subA	N28843_at	yx59d10.r1 Homo sapiens cDNA clone 266035 5',	P	I	4.8	1.48
subA	RC_AA149044_at	zi45d09.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',	P	I	11.1	4.76
subA	RC_AA258130_at	zs35f03.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',	P	I	3.4	1.28
subA	RC_AA281743_r_at	zi06h05.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',	P	I	4	0.84
subA	RC_AA406338_at	zv10f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',	P	I	4.3	1.87
subA	RC_AA424524_at	zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',	P	I	3.1	0.5
subA	RC_AA435840_at	zi80b08.s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',	P	I	5.8	2.78
subB	RC_AA027823_at	zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489638 3',	P	I	3.8	1.21
subB	RC_AA084138_at	zn17a03.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',	P	I	4.4	2.06
subB	RC_AA135406_at	zo28e08.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',	P	I	3.3	1.29
subB	RC_AA148923_at	zi27g11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',	P	I	8.2	5.66
subB	RC_H98653_at	yx12h06.s1 Homo sapiens cDNA clone 261563 3',	P	I	3.6	1.43
subB	RC_N30077_at	yw81g11.s1 Homo sapiens cDNA clone 258692 3',	P	I	6.5	4.31
subB	RC_R40166_at	yf70a09.s1 Homo sapiens cDNA clone 27448 3',	P	I	6.4	4.13
subB	RC_T90374_at	RETROVIRUS-RELATED POL POLYPROTEIN ; H, sapiens partial cDNA sequence; clone c-02a08,	P	I	4.3	4.15
subB	RC_Z38182_at		P	I	8.7	6.92
Increase in T2 mix						
subA	RC_AA054726_at	zk68e06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',	A	NC	~1.6	0.03
subB	RC_AA206042_at	similar to contains element MSR1 repetitive element ;	A	NC	~3.6	-0.29
subB	RC_R98735_at	yr31g12.s1 Homo sapiens cDNA clone 206950 3',	A	NC	~10.9	5.82
subA	AA115572_s_at	zi05d11.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to .TR:G895845 G895845 PUTATIVE P64 CLCP PROTEIN ;	A	NC	4.9	2.07
subA	AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',	P	NC	1	0
subA	AA489287_at		A	NC	2.7	0.43

Fig. 17.14

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Chip	Probe Set	Description	T2 Mix Abs Call	Diff Call	Fold Change	Sort Score
Increase in T1						
subB	RC_H68772_at	yr83f01,s1 Homo sapiens cDNA clone 211897 3',	A	NC	-4,1	-0,4
subB	RC_N30806_at	yw65f02,s1 Homo sapiens cDNA clone 257115 3',	A	NC	-1,7	0,08
subB	RC_N63143_at	yz37c12,s1 Homo sapiens cDNA clone 285238 3',	A	NC	-1,5	0,05
subB	RC_R33146_at	yh81f02,s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;	A	NC	-1,0	0
subB	RC_R46206_at	yf53d08,s1 Homo sapiens cDNA clone 152463 3',	A	NC	1,9	0,22
subB	RC_R49731_s_at	yg71e10,s1 Homo sapiens cDNA clone 38564 3',	P	NC	-1,7	0,07
subA	AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',	A	NC	-1,5	0,05
subA	AB002346_at	Human mRNA for KIAA0348 gene, complete cds,	A	NC	-1,2	-0,01
subA	D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,	P	NC	5,3	1,86
subA	M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds	M	NC	1,8	0,2
subA	N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',	A	NC	-1,1	0
subA	RC_AA149044_at	zi45d09,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',	M	NC	-3,2	0,56
subA	RC_AA258130_at	zs35f03,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',	A	NC	-3,9	-0,77
subA	RC_AA281743_r_at	zi06h05,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',	P	NC	-2,3	0,22
subA	RC_AA406338_at	zv10f06,s1 Soares NHMPu S1 Homo sapiens cDNA clone 753251 3',	P	NC	3	0,78
subA	RC_AA424524_at	zv90g02,s1 Soares NHMPu S1 Homo sapiens cDNA clone 767090 3',	A	NC	-2,2	0,2
subA	RC_AA435840_at	zi80b08,s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',	P	NC	3	0,71
subB	RC_AA027823_at	zk05c04,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',	A	NC	-2,0	0,22
subB	RC_AA084138_at	zn17a03,s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547660 3',	A	NC	1,4	0,06
subB	RC_AA135406_at	zo28e08,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',	P	NC	2,5	0,59
subB	RC_AA148923_at	zi27g11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',	P	NC	6,1	4
subB	RC_H98653_at	yx12h06,s1 Homo sapiens cDNA clone 261563 3',	A	NC	-1,1	-0,01
subB	RC_N30077_at	yw81g11,s1 Homo sapiens cDNA clone 258692 3',	P	NC	2,8	0,71
subB	RC_R40166_at	yf70a09,s1 Homo sapiens cDNA clone 27448 3',	A	NC	1,8	0,15
subB	RC_T90374_at	RETROVIRUS-RELATED POL POLYPROTEIN ; H, sapiens partial cDNA sequence; clone c-02a08,	P	NC	1,7	0,31
subB	RC_Z38182_at	zk68e06,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',	P	NC	1,9	0,23
Increase in T2 mix						
subA	RC_AA054726_at	similar to contains element MSR1 repetitive element ;	P	I	-3,1	0,43
subB	RC_AA206042_at	yr31g12,s1 Homo sapiens cDNA clone 206950 3',	P	I	-23,2	13,95
subB	RC_R98735_at	zi05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to ,TR:G895845 G895845	P	I	-6,8	0,73
subA	AA115572_s_at	PUTATIVE P64 CLCP PROTEIN, ;	P	I	8,7	5,44
subA	AA430978_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',	P	I	4,6	1,88
subA	AA489287_at		P	I	10,8	5,81

Fig. 17.15

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Chip	Probe Set	Description	T2 Solid Abs Call	Diff Call	Fold Change	Sort Score
Increase in T1						
subB	RC_H68772_at	yr83f01.s1 Homo sapiens cDNA clone 211897 3',	A	NC	~2,0	-0,12
subB	RC_N30806_at	yw65f02.s1 Homo sapiens cDNA clone 257115 3',	A	NC	~1,2	-0,01
subB	RC_N63143_at	yz37c12.s1 Homo sapiens cDNA clone 285238 3',	A	NC	~4,4	-0,47
subB	RC_R33146_at	yh81f02.s1 Homo sapiens cDNA clone 136155 3' similar to contains Alu repetitive element;	A	NC	~1,1	-0,01
subB	RC_R46206_at	yj53d08.s1 Homo sapiens cDNA clone 152463 3',	P	NC	~2,2	0,24
subB	RC_R49731_s_at	yg71e10.s1 Homo sapiens cDNA clone 38554 3',	A	NC	~1,1	0
subA	AA043223_at	zk55g12,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486790 5',	A	NC	~4,8	1,67
subA	AB002346_at	Human mRNA for KIAA0348 gene, complete cds,	P	NC	~2,4	0,32
subA	D81608_at	Human fetal brain cDNA 5'-end GEN-177B09,	P	NC	~1,4	0,03
subA	M83670_s_at	Human carbonic anhydrase IV mRNA, complete cds	P	NC	3,3	1,2
subA	N28843_at	yx59d10,r1 Homo sapiens cDNA clone 266035 5',	A	NC	~1,3	-0,02
subA	RC_AA149044_at	zi45d09.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504881 3',	P	NC	~5,0	1,75
subA	RC_AA258130_at	zs35f03.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:687197 3',	A	NC	~3,4	-0,55
subA	RC_AA281743_r_at	zi06h05.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712377 3',	A	NC	~1,9	0,12
subA	RC_AA406338_at	zv10f06.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 753251 3',	P	NC	1,2	0,01
subA	RC_AA424524_at	zv90g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 767090 3',	A	NC	~1,6	0,04
subA	RC_AA435840_at	zi80b08.s1 Soares testis NHT Homo sapiens cDNA clone 728631 3',	P	NC	1,6	0,09
subB	RC_AA027823_at	zk05c04.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 469638 3',	A	NC	~1,9	0,19
subB	RC_AA084138_at	zn17a03.s1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone 547660 3',	A	NC	4,1	1,84
subB	RC_AA135406_at	zo28e08.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 588230 3',	P	NC	2,5	0,6
subB	RC_AA148923_at	zi27g11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 503204 3',	A	NC	1	0
subB	RC_H98653_at	yx12h06.s1 Homo sapiens cDNA clone 261563 3',	A	NC	1,2	0,02
subB	RC_N30077_at	yw81g11.s1 Homo sapiens cDNA clone 258692 3',	A	NC	~2,7	-0,25
subB	RC_R40166_at	yf70a09.s1 Homo sapiens cDNA clone 27448 3',	A	NC	~2,7	0,63
subB	RC_T90374_at	RETROVIRUS-RELATED POL POLYPROTEIN ; H, sapiens partial cDNA sequence; clone c-02a08,	A	NC	1,5	0,14
subB	RC_Z38182_at	zk68e06.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 488002 3',	P	NC	3,8	1,54
Increase in T2 mix						
subA	RC_AA054726_at	similar to contains element MSR1 repetitive element ;	A	NC	~1,7	-0,06
subB	RC_AA206042_at	yr31g12.s1 Homo sapiens cDNA clone 206950 3',	A	NC	~7,9	-0,92
subB	RC_R98735_at	zi05d11,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491445 5' similar to, TR:G895845 G895845	A	NC	~2,6	-0,21
subA	AA115572_s_at	PUTATIVE P64 CLCP PROTEIN ;	A	NC	4,5	1,76
subA	AA430979_at	PMY0789 KG1a Lambda Zap Express cDNA Library Homo sapiens cDNA 5',	P	NC	~2,3	-0,17
subA	AA489287_at		A	NC	~4,1	1,28

Fig. 17.16

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Chip	Probe Set	Description	Normal Avg Diff	Abs Call
Increase in T2 mix				
subA	D82226_s_at	similar to TAT-binding protein-2,	322	P
subA	H49499_s_at	Human prealbumin gene, complete cds,	134	P
subA	M11844_at	ze92c03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',	45	A
subA	RC_AA026388_at	zk55d05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',	69	P
subA	RC_AA044601_at		399	P
subA	RC_AA182030_at		30	P
subA	RC_AA233451_at	zr30b02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',	49	M
subA	RC_AA236493_at	zr75c10.s1 Soares NhlMMPu S1 Homo sapiens cDNA clone 669234 3',	61	A
subA	RC_AA401098_f_at	zu50g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains ,Alu repetitive element;	182	P
		contains element THR repetitive element ;		
subA	RC_AA441818_at	zw62f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',	177	P
subA	RC_AA478109_at	zl89d04.s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',	35	A
subA	RC_AA481430_at	zv08g11.s1 Soares NhlMMPu S1 Homo sapiens cDNA clone 752900 3',	407	P
subA	RC_AA488878_at	aa55f02.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',	64	A
subA	RC_AA599032_at	ae41h03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',	135	A
subA	S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],	253	P
subA	U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds	324	P
subA	U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds	54	A
subB	RC_AA063574_at	ze25f03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to ,gb:X52104 P68 PROTEIN (HUMAN);	88	A
subB	RC_AA132524_at	zo20c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to ,contains Alu repetitive element;	95	A
subB	RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,	511	P
subB	RC_H12863_at	yj14b12.s1 Homo sapiens cDNA clone 148703 3',	81	A
subB	RC_N33927_s_at	yw25e09.s1 Homo sapiens cDNA clone 243784 3',	277	P
subB	RC_R08189_at	yf18f03.s1 Homo sapiens cDNA clone 127229 3',	134	M
subB	RC_R39191_s_at	yc89c12.s1 Homo sapiens cDNA clone 23345 3',	118	P
subB	RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',	142	P
subB	RC_T90746_at	yd41f10.s1 Homo sapiens cDNA clone 110827 3',	105	A
subB	RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,	67	A
Increase in T2 solid				
subA	AA011479_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,	27	A
subA	AA314779_at	zn20d05.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',	57	P
subA	RC_AA084640_at		150	A

Fig. 17.17

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Chip	Probe Set	Description	Ta Abs Call	Diff Call	Fold Change	Sort Score
Increase in T2 mix						
subA	D82226_s_at	similar to TAT-binding protein-2,	P	NC	1,1	0,01
subA	H49499_s_at		P	NC	1,5	0,1
subA	M11844_at	Human prealbumin gene, complete cds,	A	NC	-1	0
subA	RC_AA026388_at	ze92c03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',	P	NC	2	0,24
subA	RC_AA044601_at	zk55d05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',	P	NC	-1,1	-0,01
subA	RC_AA182030_at		P	NC	2	0,14
subA	RC_AA233451_at	zr30b02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',	P	NC	1,6	0,08
subA	RC_AA236493_at	zr75c10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',	P	NC	1,6	0,1
subA	RC_AA401098_f_at	zu50g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains ,Alu repetitive element;	P	NC	2,1	0,44
subA	RC_AA441818_at	contains element THR repetitive element ;	P	NC	1	0
subA	RC_AA478109_at	zw62f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',	A	NC	1,5	0,05
subA	RC_AA481430_at	zi89d04.s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',	P	NC	1,4	0,12
subA	RC_AA488878_at	zv06g11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',	P	NC	1,3	0,03
subA	RC_AA599032_at	aa55f02.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',	M	NC	1,1	0,01
subA	S73288_at	ae41h03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',	P	NC	1,2	0,04
subA		small proline-rich protein SPRK [human, odontogenic keratocysts,				
subA		ImRNA Partial, 317 nt],				
subA	U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds	P	NC	1,2	0,05
subA	U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds	A	NC	1	0
subB	RC_AA063574_at	ze25f03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to ,gb:X52104 P68 PROTEIN (HUMAN);	A	NC	1,5	0,08
subB	RC_AA132524_at	zo20c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to ,contains Alu repetitive element;	P	NC	2,3	0,48
subB	RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,	P	NC	1,7	0,37
subB	RC_H12863_at	y14b12.s1 Homo sapiens cDNA clone 148703 3',	A	NC	2,6	0,58
subB	RC_N33927_s_at	yw25e09.s1 Homo sapiens cDNA clone 243784 3',	A	NC	-2	-0,36
subB	RC_R08189_at	yf18f03.s1 Homo sapiens cDNA clone 127229 3',	P	NC	-1,1	0
subB	RC_R39191_s_at	yc89c12.s1 Homo sapiens cDNA clone 23345 3',	P	NC	2,8	0,9
subB	RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',	P	NC	-1,1	-0,01
subB	RC_T90746_at	yd41f10.s1 Homo sapiens cDNA clone 110627 3',	M	NC	1,7	0,18
subB	RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,	P	NC	2	0,23
Increase in T2 solid						
subA	AA011479_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,	A	NC	-12,4	-1,2
subA	AA314779_at	zr20d05.s1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone 547977 3',	A	NC	-2,1	-0,18
subA	RC_AA084640_at		A	NC	1,6	0,13

Fig. 17.18

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Chip	Probe Set	Description	T1			
			Abs Call	Diff Call	Fold Change	Sort Score
Increase in T2 mix	subA	D82226_s_at				
	subA	H49499_s_at				
	subA	M11844_at				
	subA	RC_AA026388_at				
	subA	RC_AA044601_at				
	subA	RC_AA182030_at				
	subA	RC_AA233451_at				
	subA	RC_AA236493_at				
	subA	RC_AA401098_f_at				
	subA	RC_AA441818_at				
subA	subA	RC_AA478109_at				
	subA	RC_AA481430_at				
	subA	RC_AA488878_at				
	subA	RC_AA599032_at				
	subA	S73288_at				
	subA	U87459_at				
	subA	U88047_at				
	subB	RC_AA063574_at				
	subB	RC_AA132524_at				
	subB	RC_F09317_at				
subB	subB	RC_H12863_at				
	subB	RC_N33927_s_at				
	subB	RC_R08189_at				
	subB	RC_R39191_s_at				
	subB	RC_T82323_at				
	subB	RC_T90746_at				
	subB	RC_Z39338_at				
	subB	RC_Z39338_at				
	subA	AA011479_at				
	subA	AA314779_at				
subA	subA	RC_AA084640_at				
	subA	RC_AA084640_at				

Fig. 17.19

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Chip	Probe Set	Description	T2 Mix Abs Call	Diff Call	Fold Change	Sort Score
Increase in T2 mix						
subA	D82226_s_at	similar to TAT-binding protein-2,	P	I	3	1,54
subA	H49499_s_at		P	I	3,3	1,4
subA	M11844_at	Human prealbumin gene, complete cds,	P	I	4,7	2,86
subA	RC_AA026388_at	z992c03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',	P	I	4,3	1,84
subA	RC_AA044601_at	zK55d05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',	P	I	4,9	4,82
subA	RC_AA182030_at		P	I	4,5	1,33
subA	RC_AA233451_at	zr30b02.s1 Stralagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',	P	I	4,5	1,75
subA	RC_AA236493_at	zr75c10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',	P	I	3	0,74
subA	RC_AA401098_f_at	zu50g01.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 741456 3' similar to contains .Alu repetitive element;	P	I	3,8	2,35
		contains element THR repetitive element ;				
subA	RC_AA441818_at	zw62f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',	P	I	3,1	1,14
subA	RC_AA478109_at	zi89d04.s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',	P	I	3,7	0,97
subA	RC_AA481430_at	zv06g11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',	P	I	5,7	6,41
subA	RC_AA488878_at	aa55f02.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',	P	I	3,3	0,99
subA	RC_AA599032_at	ae41h03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',	P	I	3,9	1,8
subA	S73288_at	small proline-rich protein SPRK (human, odontogenic keratocysts, mRNA Partial, 317 nt),	P	I	6,4	5,98
subA	U87459_at	Human autoimmunogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds	P	I	3,7	2,98
subA	U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds	P	I	3,2	0,84
subB	RC_AA063574_at	ze25f03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to .gb:X52104 P68 PROTEIN (HUMAN);	P	I	3,7	1,56
subB	RC_AA132524_at	zo20c04.s1 Stralagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to .contains Alu repetitive element;	P	I	4,3	2,17
subB	RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,	P	I	3	2,18
subB	RC_H12863_at	yj14b12.s1 Homo sapiens cDNA clone 148703 3',	P	I	3,5	1,31
subB	RC_N33927_s_at	yw25e09.s1 Homo sapiens cDNA clone 243784 3',	P	I	3,1	1,58
subB	RC_R08189_at	yf18f03.s1 Homo sapiens cDNA clone 127229 3',	P	I	4,4	2,7
subB	RC_R39191_s_at	yc89c12.s1 Homo sapiens cDNA clone 23345 3',	P	I	7,8	6,99
subB	RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',	P	I	4,1	2,37
subB	RC_T90746_at	yd41f10.s1 Homo sapiens cDNA clone 110827 3',	P	I	3,1	1,09
subB	RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,	P	I	5,8	3,24
Increase in T2 solid						
subA	AA011479_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,	P	NC	-4,3	1,2
subA	AA314779_at	zn20d05.s1 Stralagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',	P	NC	1,7	0,12
subA	RC_AA084640_at		A	NC	1	0



Fig. 17.20

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Chlp	Probe Set	Description	T2 Solid Abs Call	Diff Call	Fold Change	Sort Score
Increase in T2 mix						
subA	D82226_s_at	similar to TAT-binding protein-2,	P	NC	1,4	0,12
subA	H49499_s_at	Human prealbumin gene, complete cds,	P	NC	1,2	0,02
subA	M11844_at	ze92c03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366436 3',	A	NC	1	0
subA	RC_AA026388_at	zk55d05.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 486729 3',	A	NC	~1,6	-0,05
subA	RC_AA044601_at		P	NC	3,8	3,41
subA	RC_AA182030_at		P	NC	~3,5	0,85
subA	RC_AA233451_at	zr30b02.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone 664875 3',	M	NC	1,1	0
subA	RC_AA236493_at	zr75c10.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669234 3',	A	NC	1,9	0,21
subA	RC_AA01098_f_at	zu50g01.s1 Soares ovary tumor NBHOT Homo sapiens cDNA clone 741456 3' similar to contains ,Alu repetitive element; contains element THR repetitive element ;	P	NC	2,1	0,5
subA	RC_AA441818_at	zw62f01.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774649 3',	P	NC	1,1	0,01
subA	RC_AA478109_at	zt89d04.s1 Soares testis NHT Homo sapiens cDNA clone 729511 3',	A	NC	~1,7	0,1
subA	RC_AA481430_at	zv06g11.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 752900 3',	P	NC	1,8	0,32
subA	RC_AA488878_at	aa55f02.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824859 3',	A	NC	~2,7	-0,27
subA	RC_AA598032_at	ae41h03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 898421 3',	A	NC	2,8	0,85
subA	S73288_at	small proline-rich protein SPRK [human, odontogenic keratocysts, mRNA Partial, 317 nt],	P	NC	2,4	0,81
subA	U87459_at	Human autolymphogenic cancer/testis antigen NY-ESO-1 mRNA, complete cds	M	NC	1,1	0,01
subA	U88047_at	Human DNA binding protein homolog (DRX) mRNA, partial cds	P	NC	2,4	0,39
subB	RC_AA063574_at	ze25f03.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 360029 3' similar to ,gc:X52104 P68 PROTEIN (HUMAN);	A	NC	2,5	0,58
subB	RC_AA132524_at	zo20c04.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587430 3' similar to ,contains Alu repetitive element;	P	NC	3	0,94
subB	RC_F09317_at	H, sapiens partial cDNA sequence; clone c-2zh11,	A	NC	1,4	0,13
subB	RC_H12863_at	yj14b12.s1 Homo sapiens cDNA clone 148703 3',	A	NC	2,8	0,77
subB	RC_N33927_s_at	w25e09.s1 Homo sapiens cDNA clone 243784 3',	P	NC	1,8	0,31
subB	RC_R08189_at	yf18f03.s1 Homo sapiens cDNA clone 127229 3',	A	NC	-1	0
subB	RC_R39191_s_at	yc89c12.s1 Homo sapiens cDNA clone 23345 3',	P	NC	2	0,32
subB	RC_T82323_at	AS322 Homo sapiens cDNA clone AS322 3',	P	NC	1,6	0,17
subB	RC_T90746_at	yd41f10.s1 Homo sapiens cDNA clone 110827 3',	P	NC	2,2	0,4
subB	RC_Z39338_at	H, sapiens partial cDNA sequence; clone c-17f11,	P	NC	~4,7	2,24
Increase in T2 solid						
subA	AA011479_at	EST186601 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end,	P	I	-22,9	15,52
subA	AA314779_at	zn20d05.s1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 547977 3',	P	I	-41,3	27,3
subA	RC_AA084640_at		P	I	~3,7	1,06

Fig. 17.21

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Chlp	Probe Set	Description	Normal Avg Diff	Abs Call
Increase in T2 solid subA	RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to .gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);	-23	P
subA	RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',	53	M
subA	RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',	28	A
subA	RC_AA491465_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',	16	A
subA	RC_AA499936_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,	20	A
subA	RC_AA598689_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',	24	A
subA	RC_AA135153_at	zq50a09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to .gb:M24283 INTERCELLULAR	25	A
subB	RC_AA197311_s_at	ADHESION MOLECULE-1 PRECURSOR (HUMAN);	37	A
subB	RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',	39	A
subB	RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',	-233	A
subB	RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',	46	M
subB	RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',	54	A
subB	RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3',	68	A
subB	RC_R59292_at	yh18a10,s1 Homo sapiens cDNA clone 37689 3',	-114	A
subB	RC_T24099_at	seq2287 Homo sapiens cDNA clone Cot250Ft-b4HB3MA-8 3',	-48	A
subA	AA150364_at	z107b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',	40	A
subA	AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5'3',	-507	P
subA	AA452353_l_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',	89	A
subA	AB002316_at	Human mRNA for KIAA0318 gene, partial cds,	120	P
subA	H88858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',	361	A
subA	M93119_s_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds	34	A
subA	R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',	60	P
subA	RC_AA004274_at	similar to contains element MER22 repetitive element ;,	62	P
subA	RC_AA004415_at	z174e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to .contains Alu repetitive element;	424	P
subA	RC_AA007160_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',	223	A
subA	RC_AA053660_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',	49	P
subA	RC_AA252603_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',	117	P
subA	RC_AA411944_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',	274	A
subA	RC_AA412700_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',	59	P
subA	RC_AA430032_at		53	P
subA	RC_AA430368_at		557	P
			285	P
			48	A

Fig. 17.22

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Chip	Probe Set	Description	Ta	Abs Call	Diff Call	Fold Change	Sort Score
Increase in T2 solid							
subA	RC_AA121534_at	zk69d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to ,gb:X79535	A	NC		-3,3	-0,23
		TUBULIN BETA-2 CHAIN (HUMAN);					
subA	RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3';	A	NC		-1,3	-0,02
subA	RC_AA461549_at	zk62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3';	A	NC		-1,2	-0,01
subA	RC_AA491465_at		A	NC		-1,0	0
subA	RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3';	A	NC		-1,5	-0,02
subA	RC_AA598689_at		A	NC		-1	0
subA	W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA;	A	NC		-1,8	-0,06
subB	RC_AA004887_at		A	NC		-1,2	0,01
subB	RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3';	P	NC		-2,5	0,39
subB	RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to ,gb:M24283 INTERCELLULAR	A	NC		-2,6	0,17
		ADHESION MOLECULE-1 PRECURSOR (HUMAN);					
subB	RC_H80622_at	yu77b08,s1 Homo sapiens cDNA clone 239795 3';	A	NC		-2,2	-0,12
subB	RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3';	A	NC		1	0
subB	RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3';	A	NC		-3,2	-0,36
subB	RC_R38678_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3';	A	NC		-1,2	-0,01
subB	RC_R56066_s_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3';	A	NC		-1,9	0,08
subB	RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3';	A	NC		-2,5	-0,16
subB	RC_T24099_at	seq2287 Homo sapiens cDNA clone Co250FT-b4HB3MA-8 3';	A	NC		-5,3	0,48
subA	AA150364_at	zi07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5';	P	NC		1,6	0,11
subA	AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5'/3';	A	NC		1,2	0,03
subA	AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5';	P	NC		1,2	0,05
subA	AB002316_at	Human miRNA for KIAA0318 gene, partial cds;	A	NC		1,6	0,06
subA	H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5';	P	NC		1,2	0,02
subA	M93119_s_at	Human zinc-finger DNA-binding motifs (1A-1) mRNA, complete cds	M	NC		1,3	0,04
subA	R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5';	P	NC		1,1	0
subA	RC_AA004274_at	similar to contains element MER22 repetitive element ;;	P	NC		-1,3	-0,05
subA	RC_AA004415_at	zi74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to ,contains Alu repetitive element;	P	NC		-1,7	-0,08
subA	RC_AA007160_at		P	NC		1,5	0,11
subA	RC_AA053660_at	zs14a11,s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3';	P	NC		-1,5	-0,09
		zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3';	P	NC		-1,1	-0,01
subA	RC_AA252603_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3';	P	NC		-1,4	-0,04
subA	RC_AA411944_at		P	NC		1	0
subA	RC_AA412700_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3';	P	NC		-1,4	-0,08
subA	RC_AA430032_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3';	P	NC		1,1	0,01
subA	RC_AA430368_at		P	NC			

Fig. 17.23

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Chip	Probe Set	Description	T1			
			Abs Call	Diff Call	Fold Change	Sort Score
subA	RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535	A	NC	~-2,5	-0,1
subA	RC_AA131047_s_at	TUBULIN BETA-2 CHAIN (HUMAN);				
subA	RC_AA461549_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3';	A	NC	-1,4	-0,04
subA	RC_AA491465_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3';	A	NC	1,1	0,01
subA	RC_AA496936_at		A	NC	~-1,2	0,01
subA	RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3';	A	NC	~-1,5	-0,02
subA	RC_AA598689_at		A	NC	-1,2	-0,01
subA	W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA;	P	NC	2,2	0,2
subB	RC_AA004887_at		P	NC	~-1,4	0,02
subB	RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3';	P	NC	~-2,9	0,41
subB	RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTERCELLULAR	A	NC	~-4,0	-0,33
subB	RC_H80622_at	ADHESION MOLECULE-1 PRECURSOR (HUMAN);				
subB	RC_N64436_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3';	A	NC	~-2,5	-0,15
subB	RC_N67583_at	za33a09,s1 Homo sapiens cDNA clone 294328 3';	A	NC	~-2,3	-0,15
subB	RC_R38678_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3';	A	NC	~-4,6	-1,27
subB	RC_R56066_s_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3';	A	NC	~-1,9	-0,09
subB	RC_R59292_at	yg91d08,s1 Homo sapiens cDNA clone 40992 3';	A	NC	~-1,9	0,09
subB	RC_T24089_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3';	A	NC	~-1,8	-0,08
subA	AA150364_at	seq2287 Homo sapiens cDNA clone Co1250F1-b4HB3MA-8 3';	A	NC	~-3,9	0,32
subA	AA174185_at	zi07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5';	A	NC	1,2	0,02
subA	AA452353_i_at	[PTH207 HTCDL1 Homo sapiens cDNA 5'/3';	P	NC	1,8	0,23
subA	AB002316_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5';	P	NC	1,7	0,28
subA	H86858_at	Human mRNA for KIAA0318 gene, partial cds;	A	NC	1,4	0,04
subA	IM93119_s_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5';	P	NC	1,8	0,15
subA	R72037_at	Human zinc-finger DNA-binding motifs (IA-1) mRNA, complete cds	P	NC	1,7	0,13
subA	RC_AA004274_at	yi86c09,r1 Homo sapiens cDNA clone 155632 5';	P	NC	1,2	0,06
subA	RC_AA004415_at	similar to contains element MER22 repetitive element ;;	P	NC	-1,2	-0,03
subA	RC_AA007160_at	zi74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to ,contains Alu repetitive element;	P	NC	1,7	0,12
subA	RC_AA053660_at	zs14a11,s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3';	A	NC	1	0
subA	RC_AA252603_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3';	P	NC	-1,3	-0,04
subA	RC_AA411944_at	zu12q03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3';	P	NC	1,2	0,01
subA	RC_AA412700_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3';	P	NC	1,7	0,12
subA	RC_AA430032_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3';	P	NC	-1,1	-0,01
subA	RC_AA430358_at		A	NC	1,9	0,42
subA					1,5	0,07

Fig. 17.24

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Chip	Probe Set	Description	T2 Mix Abs Call	Diff Call	Fold Change	Sort Score
Increase in T2 solid	RC_AA121534_at					
subA	RC_AA121534_at	zk89d11,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to gb:X79535	P	NC	-1,5	0,04
		TUBULIN BETA-2 CHAIN (HUMAN);				
subA	RC_AA131047_s_at	zo16f05,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3',	A	NC	-1,6	-0,05
subA	RC_AA461549_at	zx62b09,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3',	A	NC	-1,3	-0,02
subA	RC_AA491465_at		A	NC	-1,2	0,01
subA	RC_AA496936_at	ae32d03,s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3',	A	NC	-2,0	-0,08
subA	RC_AA598689_at		M	NC	-1,7	0,07
subA	W26392_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA,	A	NC	-1,5	0,04
subB	RC_AA004887_at		A	NC	-2,0	0,22
subB	RC_AA135153_at	zo24g02,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3',	P	NC	-2,3	0,33
subB	RC_AA197311_s_at	zq50e09,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to gb:M24283 INTERCELLULAR	A	NC	-2,3	0,15
		ADHESION MOLECULE-1 PRECURSOR (HUMAN);				
subB	RC_H80622_at	yu77b06,s1 Homo sapiens cDNA clone 239795 3',	A	NC	-1,4	-0,03
subB	RC_N64436_at	za33a09,s1 Homo sapiens cDNA clone 294328 3',	A	NC	-2,4	-0,16
subB	RC_N67583_at	yz42c02,s1 Homo sapiens cDNA clone 285698 3',	A	NC	-4,4	-0,49
subB	RC_R38676_at	yc89d05,s1 Homo sapiens cDNA clone 23443 3',	A	NC	-2,7	0,21
subB	RC_R50666_s_at	y91d08,s1 Homo sapiens cDNA clone 40992 3',	A	NC	-1,7	-0,07
subB	RC_R59292_at	yh16a10,s1 Homo sapiens cDNA clone 37689 3',	A	NC	-2,4	0,34
subB	RC_T24099_at	seq2287 Homo sapiens cDNA clone C0250Ft-b4HB3MA-8 3',	A	NC	-4,8	0,48
subA	AA150364_at	zi07b03,r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5',	P	NC	1,6	0,1
subA	AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5/3',	M	NC	1,7	0,16
subA	AA452353_i_at	zx15d05,r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5',	P	NC	1,7	0,33
subA	AB002316_at	Human mRNA for KIAA0318 gene, partial cds,	A	NC	2,2	0,25
subA	H86858_at	ys72d05,r1 Homo sapiens cDNA clone 220329 5',	M	NC	1,8	0,15
subA	M93119_s_at	Human zinc-finger DNA-binding motifs (JA-1) mRNA, complete cds	A	NC	1,6	0,11
subA	R72037_at	yj86c09,r1 Homo sapiens cDNA clone 155632 5',	P	NC	-1,2	-0,03
subA	RC_AA004274_at	similar to contains element MER22 repetitive element ;,	P	NC	-2,3	-0,47
subA	RC_AA004415_at		P	NC	2	0,22
subA	RC_AA007160_at	zi74e07,s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to ,contains Alu repetitive element;	P	NC	1,4	0,06
subA	RC_AA053660_at	zs14a11,s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3',	P	NC	-1,2	-0,03
subA	RC_AA252603_at	zu03h01,s1 Soares testis NHT Homo sapiens cDNA clone 730801 3',	P	NC	1,2	0,01
subA	RC_AA411944_at	zu12g03,s1 Soares testis NHT Homo sapiens cDNA clone 731668 3',	P	NC	1,2	0,02
subA	RC_AA412700_at	zw65f05,s1 Soares testis NHT Homo sapiens cDNA clone 781089 3',	P	NC	-1,4	-0,13
subA	RC_AA430032_at	zw20f06,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3',	P	NC	1,6	0,2
subA	RC_AA430368_at		A	NC	-1,1	-0,01

Fig. 17.25

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Chip	Probe Set	Description	T2 Solid Abs Call	Diff Call	Fold Change	Sort Score
subA	RC_AA121534_at	zk89d11.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 490005 3' similar to .gb:X79535 TUBULIN BETA-2 CHAIN (HUMAN);	P	I	-9.1	4.69
subA	RC_AA131047_s_at	zo16f05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587073 3';	P	I	-4.9	1.78
subA	RC_AA461549_at	zx62b09.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 796025 3';	P	I	-8.2	4.35
subA	RC_AA491465_at		P	I	-7.1	3.4
subA	RC_AA496936_at	ae32d03.s1 Gessler Wilms tumor Homo sapiens cDNA clone 897509 3';	P	I	-4.8	1.56
subA	RC_AA598689_at	30g3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA;	P	I	-4.9	1.75
subA	W26392_at		P	I	-6.9	3.26
subB	RC_AA004887_at		P	I	-8.2	5.57
subB	RC_AA135153_at	zo24g02.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 587858 3';	P	I	-11.8	9.42
subB	RC_AA197311_s_at	zq50e09.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645064 3' similar to .gb:M24283 INTERCELLULAR ADHESION MOLECULE-1 PRECURSOR (HUMAN);	P	I	-4.0	0.41
subB	RC_H80622_at	yu77b06.s1 Homo sapiens cDNA clone 239795 3';	P	I	-4.2	1.53
subB	RC_N64436_at	za33a09.s1 Homo sapiens cDNA clone 294328 3';	P	I	-3.9	1.47
subB	RC_N67583_at	yz42c02.s1 Homo sapiens cDNA clone 285698 3';	P	I	-7.1	4.6
subB	RC_R38678_at	yc89d05.s1 Homo sapiens cDNA clone 23443 3';	P	I	-17.3	14.43
subB	RC_R56066_s_at	yg91d08.s1 Homo sapiens cDNA clone 40992 3';	P	I	-5.5	2.26
subB	RC_R59292_at	yh16a10.s1 Homo sapiens cDNA clone 37689 3';	P	I	-28.4	25.16
subB	RC_T24099_at	seq2287 Homo sapiens cDNA clone Ccl250Ft-b4HB3MA-8 3';	P	I	-29.3	24.83
subA	AA150364_at	z107b03.r1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 491597 5';	P	I	3.4	1.3
subA	AA174185_at	PTH207 HTCDL1 Homo sapiens cDNA 5/3';	P	I	3.1	1.16
subA	AA452353_i_at	zx15d05.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 786537 5';	P	I	3.1	1.99
subA	AB002316_at	Human mRNA for KIAA0318 gene, partial cds;	P	I	8.5	5.52
subA	H86858_at	ys72d05.r1 Homo sapiens cDNA clone 220329 5';	P	I	3.5	1.09
subA	W93119_s_at	Human zinc-finger DNA-binding motifs (JA-1) mRNA, complete cds	P	I	21	17.52
subA	R72037_at	yj86c09.r1 Homo sapiens cDNA clone 155632 5';	P	I	3	2.1
subA	RC_AA004274_at	similar to contains element MER22 repetitive element;;	P	I	4.4	3.54
subA	RC_AA004415_at		P	I	3.5	1.01
subA	RC_AA007160_at		P	I	3.1	1.17
subA	RC_AA053660_at	z174e07.s1 Stratagene colon (#937204) Homo sapiens cDNA clone 510372 3' similar to, contains Alu repetitive element;	P	I	4.7	3.63
subA	RC_AA252603_at	zsl14a11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685148 3';	P	I	3	0.78
subA	RC_AA411944_at	zu03h01.s1 Soares testis NHT Homo sapiens cDNA clone 730801 3';	P	I	17.4	13.2
subA	RC_AA412700_at	zu12g03.s1 Soares testis NHT Homo sapiens cDNA clone 731668 3';	P	I	3	2.1
subA	RC_AA430032_at	zw65f05.s1 Soares testis NHT Homo sapiens cDNA clone 781089 3';	P	I	4.4	3.63
subA	RC_AA430368_at	zw20f06.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 769859 3';	P	I	3.2	0.83

Fig. 17.26

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Chip	Probe Set	Description	Normal Avg Diff	Abs Call
Increase in T2 solid				
subA	RC_AA434113_at	zw24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;	110	A
subA	RC_AA441791_at	zw62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774826 3' ;	119	A
subA	RC_AA449419_at	zx05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3' ;	51	P
subA	RC_AA449914_at	zx37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3' ;	173	A
subA	RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07.	187	A
subA	T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);	50	A
subA	W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 ;	210	P
subB	RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3' ;	90	P
subB	RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN ;	77	P
subB	RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;	196	A
subB	RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3' ;	178	P
subB	RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3' ;	192	P
subB	RC_AA151245_at	zi40t12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3' ;	107	A
subB	RC_AA164252_f_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3' ;	240	A
subB	RC_AA167006_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3' ;	187	A
subB	RC_AA206225_at	Human aorta cDNA 3'-end GEN-330D04.	66	A
subB	RC_D62834_at	Human fetal brain cDNA 3'-end GEN-121E12.	177	P
subB	RC_D80981_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3' ;	103	P
subB	RC_H16772_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3' ;	109	A
subB	RC_N62522_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3' ;	344	P
subB	RC_N68222_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1266 3' ;	384	P
subB	RC_T10316_s_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	622	A
subB	RC_W37382_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;	246	P
subB	RC_W60582_at		158	A
subB	RC_W84768_at		199	P

Fig. 17.27

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Chip	Probe Set	Description	Ta Abs Call	Diff Call	Fold Change	Sort Score
Increase in T2 solid						
subA	RC_AA434113_at	zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar .to contains element TAR1 repetitive element ;	A	NC	-1,9	-0,19
subA	RC_AA441791_at	zw62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3' ;	A	NC	1	0
subA	RC_AA449419_at	zx05b03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3' ;	P	NC	-1	0
subA	RC_AA449914_at	zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3' ;	A	NC	-1,6	-0,14
subA	RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07.	A	NC	1,5	0,21
subA	T95813_f_at	ye45f10.r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1	P	NC	11,6	7,83
subA	W80846_at	HEMOGLOBIN ALPHA CHAIN (HUMAN); zd83f05.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 .;	P	NC	-1,1	-0,01
subB	RC_AA031360_s_at	zk16f07.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3' ;	P	NC	-1,1	0
subB	RC_AA063624_at	ze87h05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN, .;	P	NC	1,1	0
subB	RC_AA076238_at	zm19e04.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;	P	NC	1,7	0,22
subB	RC_AA076350_at	zm91a02.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3' ;	A	NC	-1,5	-0,1
subB	RC_AA101983_at	zk87c02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3' ;	P	NC	-1,3	-0,04
subB	RC_AA151245_at	zl40f12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3' ;	P	NC	-1,0	0
subB	RC_AA164252_f_at	zo86b08.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3' ;	P	NC	1,6	0,14
subB	RC_AA167006_at	cdNA clone 645662 3' ;	P	NC	-2,3	-0,4
subB	RC_AA206225_at	zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3' ;	A	NC	1,7	0,14
subB	RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,	P	NC	1,2	0,04
subB	RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,	P	NC	-1,4	-0,05
subB	RC_H16772_at	ym34g02.s1 Homo sapiens cDNA clone 50227 3' ;	A	NC	-1,8	-0,17
subB	RC_N62522_at	yz74f08.s1 Homo sapiens cDNA clone 288807 3' ;	A	NC	-1,7	-0,18
subB	RC_N68222_at	yz56e12.s1 Homo sapiens cDNA clone 287086 3' ;	A	NC	-1,9	-0,38
subB	RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1266 3' ;	A	NC	-1,1	-0,01
subB	RC_W37382_at	zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN	A	NC	1,2	0,03
subB	RC_W60582_at	GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	A	NC	1,3	0,04
subB	RC_W84768_at	zh53d03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element .;	P	NC	1,5	0,11



Fig. 17.28

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Chip	Probe Set	Description	T1			
			Abs Call	Diff Call	Fold Change	Sort Score
subA	RC_AA434113_at	zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;	A	NC	-3,2	-0,67
subA	RC_AA441791_at	zw62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3' ;	A	NC	-2,6	0,11
subA	RC_AA449419_at	zx05b03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3' ;	A	NC	-2,8	-0,34
subA	RC_AA449914_at	zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3' ;	A	NC	1,1	0
subA	RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07.	A	NC	2,4	0,77
subA	T95813_f_at	ye45f10.r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_ma1	A	NC	15,6	11,3
subA	W80846_at	HEMOGLOBIN ALPHA CHAIN (HUMAN);	P	NC	1,1	0,01
subB	RC_AA031380_s_at	zd83f05.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 ;	A	NC	1	0
subB	RC_AA063624_at	zk16f07.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3' ;	P	NC	1,8	0,18
subB	RC_AA076238_at	ze87h05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN ;	A	NC	2,2	0,61
subB	RC_AA076350_at	zm19e04.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element ;	A	NC	1,4	0,08
subB	RC_AA101983_at	zk87c02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3' ;	P	NC	1,9	0,36
subB	RC_AA151245_at	zl40f12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3' ;	A	NC	1,3	0,03
subB	RC_AA164252_f_at	zo86b08.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3' ;	A	NC	1,8	0,24
subB	RC_AA167006_at	cdna clone 593751 3' ;	P	NC	-1,9	-0,23
subB	RC_AA206225_at	zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3' ;	A	NC	-1,8	-0,1
subB	RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,	P	NC	1,7	0,21
subB	RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,	P	NC	1,8	0,2
subB	RC_H16772_at	ym34g02.s1 Homo sapiens cDNA clone 50227 3' ;	P	NC	1	0
subB	RC_N62522_at	yz74f08.s1 Homo sapiens cDNA clone 288807 3' ;	A	NC	-1,1	-0,01
subB	RC_N68222_at	yz56e12.s1 Homo sapiens cDNA clone 287086 3' ;	A	NC	-1,7	-0,22
subB	RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1266 3' ;	P	NC	1,8	0,49
subB	RC_W37382_at	zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN	A	NC	2,1	0,6
subB	RC_W60582_at	GRANULOSA CELL 13.0 KD PROTEIN HGR74 (HUMAN);	A	NC	2	0,37
subB	RC_W84768_at	zh53d03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;	P	NC	2,1	0,48

Fig. 17.29

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Chip	Probe Set	Description	T2 Mix			
			Abs Call	Diff Call	Fold Change	Sort Score
subA	RC_AA434113_at	zw24b11.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element;	A	NC	-1	0
subA	RC_AA441791_at	zw62c02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3';	A	NC	1,1	0
subA	RC_AA449419_at	zx05b03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3';	P	NC	-1,1	0
subA	RC_AA449914_at	zx37g02.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788890 3';	A	NC	1,4	0,09
subA	RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,	A	NC	1,5	0,14
subA	T95813_f_at	ye45f10.r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_ma1	P	NC	68,9	46,5
subA	W80846_at	HEMOGLOBIN ALPHA CHAIN (HUMAN);	P	NC	1,3	0,04
subB	RC_AA031360_s_at	zd83f05.r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2;;	P	NC	1,1	0
subB	RC_AA063624_at	zk16f07.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3';	P	NC	1,7	0,14
subB	RC_AA076238_at	ze87h05.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN;;	P	NC	2,6	0,98
subB	RC_AA076350_at	zm19e04.s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element;;	P	NC	1,6	0,09
subB	RC_AA101983_at	zm91a02.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 545258 3';	P	NC	1,4	0,08
subB	RC_AA151245_at	zk87c02.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3';	A	NC	1,3	0,04
subB	RC_AA164252_f_at	zl40f12.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3';	A	NC	1,1	0
subB	RC_AA167006_at	zo86b08.s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3';	A	NC	-1,5	-0,09
subB	RC_AA206225_at	zq56g08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3';	A	NC	-1,7	-0,07
subB	RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04;	P	NC	2,4	0,73
subB	RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12;	P	NC	1	0
subB	RC_H16772_at	ym34g02.s1 Homo sapiens cDNA clone 50227 3';	A	NC	-1,6	-0,11
subB	RC_N62522_at	yz74f08.s1 Homo sapiens cDNA clone 288807 3';	A	NC	1,1	0,01
subB	RC_N68222_at	yz56e12.s1 Homo sapiens cDNA clone 287086 3';	A	NC	-2	-0,39
subB	RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1266 3';	A	NC	1,4	0,13
subB	RC_W37382_at	zd25e10.s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN	P	NC	2,1	0,54
subB	RC_W60582_at	GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);	A	NC	1,3	0,05
subB	RC_W84768_at	zh53d03.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1_b1 L1 repetitive element;;	P	NC	3,2	1,61

Fig. 17.30

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Chlp	Probe Set	Description	T2 Solid		
			Abs Call	Diff Call	Sort Score
subA	RC_AA434113_at	zW24b11,s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone 770205 3' similar to contains element TAR1 repetitive element ;	P	I	2,8
subA	RC_AA441791_at	zW62c02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 774626 3' ;	P	I	3,24
subA	RC_AA449419_at	zX05b03,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 785549 3' ;	P	I	1,2
subA	RC_AA449914_at	zX37g02,s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 788690 3' ;	P	I	3,06
subA	RC_D59847_at	Human fetal brain cDNA 3'-end GEN-070G07,	P	I	15,32
subA	T95813_f_at	ye45f10,r1 Homo sapiens cDNA clone 120715 5' similar to gb:V00493_rna1 HEMOGLOBIN ALPHA CHAIN (HUMAN);	P	I	18,82
subA	W80846_at	zd83f05,r1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 347265 5' similar to SW:SYB2_XENLA P47193 SYNAPTOBREVIN 2 ;	P	I	1,55
subB	RC_AA031360_s_at	zk16f07,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 470725 3' ;	P	I	12,31
subB	RC_AA063624_at	ze87h05,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 366009 3' similar to TR:G300372 G300372 CELL GROWTH REGULATING NUCLEOLAR PROTEIN ;	P	I	0,91
subB	RC_AA076238_at	zm19e04,s1 Stratagene pancreas (#937208) Homo sapiens cDNA clone 526110 3' similar to contains Alu repetitive element ;	P	I	1,91
subB	RC_AA076350_at	zm91a02,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 645258 3' ;	P	I	13,48
subB	RC_AA101983_at	zk87c02,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 489794 3' ;	P	I	3,01
subB	RC_AA151245_at	zi40f12,s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 504431 3' ;	P	I	1,33
subB	RC_AA164252_f_at	zo86b08,s1 Stratagene ovarian cancer (#937219) Homo sapiens cDNA clone 593751 3' ;	P	I	9,67
subB	RC_AA167006_at	zcDNA clone 593751 3' ;	P	I	1,54
subB	RC_AA206225_at	zq56g08,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 645662 3' ;	P	I	2,38
subB	RC_D62834_at	Human aorta cDNA 3'-end GEN-330D04,	P	I	2,79
subB	RC_D80981_at	Human fetal brain cDNA 3'-end GEN-121E12,	P	I	9,69
subB	RC_H16772_at	ym34g02,s1 Homo sapiens cDNA clone 50227 3' ;	P	I	1,17
subB	RC_N62522_at	yz74f08,s1 Homo sapiens cDNA clone 288807 3' ;	P	I	3,14
subB	RC_N68222_at	yz56e12,s1 Homo sapiens cDNA clone 287086 3' ;	P	I	2,29
subB	RC_T10316_s_at	seq1014 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F266 3' ;	P	I	5,01
subB	RC_W37382_at	zd25e10,s1 Soares fetal heart NbHH19W Homo sapiens cDNA clone 341706 3' similar to gb:M38188 OVARIAN GRANULOSA CELL 13,0 KD PROTEIN HGR74 (HUMAN);	P	I	5,47
subB	RC_W60582_at	zh53d03,s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone 415781 3' similar to contains L1,b1 L1 repetitive element ;	P	I	9,69
subB	RC_W84768_at		P	I	10,78

Fig. 17.31

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Chip	Probe Set	Description	Normal Avg Diff	Abs Call
Increase in T1+T2 Mix				
subA	RC_AA176164_i_at	zp23h11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 610341 3'.	-61	A
subA	W52431_at	zc45b12.r1 Soares senescent fibroblasts NbHSF Hom sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN, [2] PIR:S07807 ;.	79	P
subB	RC_AA019641_at	contains element L1 repetitive element ;.	38	A
subB	RC_H13696_at	yi09e04.s1 Homo sapiens cDNA clone 148254 3'.	-34	A
subB	RC_N22404_at	yw37h03.s1 Homo sapiens cDNA clone 254453 3'.	-10	A
subB	RC_R07501_at	ye97f06.s1 Homo sapiens cDNA clone 125699 3'.	493	A
subA	C14412_s_at	Human fetal brain cDNA 5'-end GEN-055A09.	564	P
subA	RC_AA236455_s_at	zr75g02.s1 Soares Nh-MPu S1 Homo sapiens cDNA clone 669266 3'.	146	P
subA	RC_AA417030_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3'.	41	P
subB	RC_F10945_at	H. sapiens partial cDNA sequence; clone c-3mb07.	125	P
subB	RC_N29319_at	yw84a11.s1 Homo sapiens cDNA clone 258908 3'.	64	P
subB	RC_N68038_f_at	yz53a12.s1 Homo sapiens cDNA clone 286750 3'.	161	P
Increase in T1+ T2 Solid				
subA	RC_AA417030_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3'.	41	P
subA	RC_AA608545_at	ae53d05.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3'.	-43	A
subB	RC_H09261_at	yi98c12.s1 Homo sapiens cDNA clone 46410 3' similar to contains Alu repetitive element; contains MSR1 repetitive element ;.	-38	A
subB	RC_N68871_at	za23h07.s1 Homo sapiens cDNA clone 293437 3' similar to contains Alu repetitive element;.	61	A
subA	AA129196_at	zn29d08.r1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 548847 5' similar to SW:NU1M_ MOUSE P03888 NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 1 ;.	45	A
subA	RC_AA620553_s_at	H. sapiens partial cDNA sequence; clone c-3ig08.	97	A
subB	RC_F10779_at	H. sapiens partial cDNA sequence; clone c-3mb07.	71	P
subB	RC_F10945_at	yr72d10.s1 Homo sapiens cDNA clone 210835 3'.	125	P
subB	RC_H65650_at	yz53a12.s1 Homo sapiens cDNA clone 286750 3'.	121	A
subB	RC_N68038_f_at		161	P
Increase in T1+T2 Mix +T2 solid				
subA	RC_AA417030_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3'.	41	P
subA	RC_AA608545_at	H. sapiens partial cDNA sequence; clone c-3mb07.	-43	A
subB	RC_F10945_at	yz53a12.s1 Homo sapiens cDNA clone 286750 3'.	125	P
subB	RC_N68038_f_at		161	P

Fig. 17.32

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Chip	Probe Set	Description	Ta Abs Call	Diff Call	Fold Change	Sort Score
Increase in T1+T2 Mix						
subA	RC_AA176164_l_at	zp23h11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 610341 3',	P	NC	-5,7	0,31
subA	W52431_at	zc45b12,r1 Soares senescent fibroblasts NBHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT P14730 WDNM1 PROTEIN, [2] PIR:S07807 ;,	P	NC	-1,9	-0,16
subB	RC_AA019641_at	contains element L1 repetitive element ;,	P	NC	-2,6	0,25
subB	RC_H13696_at	yj09e04,s1 Homo sapiens cDNA clone 148254 3',	P	NC	-3,6	0,56
subB	RC_N22404_at	yw37h03,s1 Homo sapiens cDNA clone 254453 3',	A	NC	-1,8	-0,17
subB	RC_R07501_at	ye97f06,s1 Homo sapiens cDNA clone 125699 3',	A	NC	-3,6	0,29
subA	C14412_s_at	Human fetal brain cDNA 5'-end GEN-055A09,	P	NC	-1,1	-0,02
subA	RC_AA236455_s_at	zr75g02,s1 Soares NhlMPu S1 Homo sapiens cDNA clone 669266 3',	P	NC	2	0,34
subA	RC_AA417030_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',	P	NC	2,4	0,31
subB	RC_F10945_at	H, sapiens partial cDNA sequence; clone c-3mb07,	P	NC	3,2	1,32
subB	RC_N29319_at	yw84a11,s1 Homo sapiens cDNA clone 258908 3',	P	NC	-1,5	-0,06
subB	RC_N68038_f_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3',	P	NC	1,7	0,19
Increase in T1+ T2 Solid						
subA	RC_AA417030_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',	P	NC	2,4	0,31
subA	RC_AA608545_at	ae53d05,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3',	A	NC	1,1	0
subB	RC_H09261_at	yj98c12,s1 Homo sapiens cDNA clone 46410 3' similar to contains Alu repetitive element;contains MSR1 repetitive element ;,	A	NC	-1,2	-0,02
subB	RC_N68871_at	za23h07,s1 Homo sapiens cDNA clone 293437 3' similar to contains Alu repetitive element ;,	A	NC	-2,1	-0,12
subA	AA129196_at	zn29d09,r1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 548847 5' similar to SW:NU1M_MOUSE P03888 NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 1 ;,	P	NC	1,7	0,1
subA	RC_AA620553_s_at	H, sapiens partial cDNA sequence; clone c-3ig08,	A	NC	-1,4	-0,06
subB	RC_F10779_at	H, sapiens partial cDNA sequence; clone c-3mb07,	A	NC	1,8	0,16
subB	RC_F10945_at	H, sapiens partial cDNA sequence; clone c-3mb07,	P	NC	3,2	1,32
subB	RC_H65650_at	y72d10,s1 Homo sapiens cDNA clone 210835 3',	M	NC	2,3	0,53
subB	RC_N68038_f_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3',	P	NC	1,7	0,19
Increase in T1+T2 Mix +T2 solid						
subA	RC_AA417030_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',	P	NC	2,4	0,31
subA	RC_AA608545_at	H, sapiens partial cDNA sequence; clone c-3mb07,	A	NC	1,1	0
subB	RC_F10945_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3',	P	NC	3,2	1,32
subB	RC_N68038_f_at		P	NC	1,7	0,19

Fig. 17.33

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Chip	Probe Set	Description	T1			
			Abs Call	Diff Call	Fold Change	Sort Score
Increase in T1+T2 Mix						
subA	RC_AA176164_i_at	zp23h11,s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 610341 3';	P	I	-7,4	2,56
subA	W52431_at	zc45b12,r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT	P	I	-21,6	10,27
subB	RC_AA019641_at	P14730 WDNM1 PROTEIN, [2] PIR:S07807 ;	P	I	-5,2	1,9
subB	RC_H13696_at	contains element L1 repetitive element ;;	P	I	-12,4	7,14
subB	RC_N22404_at	yj09e04,s1 Homo sapiens cDNA clone 148254 3';	P	I	-19,4	13,95
subB	RC_R07501_at	yw37h03,s1 Homo sapiens cDNA clone 254453 3';	P	I	-14,8	9,39
subA	C14412_s_at	ye97f06,s1 Homo sapiens cDNA clone 125699 3';	P	I	3,1	2,56
subA	RC_AA236455_s_at	Human fetal brain cDNA 5'-end GEN-055A09;	P	I	7,4	7,12
subA	RC_AA417030_at	zr75g02,s1 Soares NHMPu S1 Homo sapiens cDNA clone 669266 3';	P	I	6,9	3,38
subB	RC_F10945_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3';	P	I	3,5	1,63
subB	RC_N29319_at	H, sapiens partial cDNA sequence; clone c-3mb07;	P	I	3,7	1,29
subB	RC_N68038_f_at	yw84a11,s1 Homo sapiens cDNA clone 258908 3';	P	I	4,6	3,2
Increase in T1+T2 Solid						
subA	RC_AA417030_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3';	P	I	6,9	3,38
subA	RC_AA608545_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3';	P	I	-7,0	2,41
subB	RC_H09261_at	ae53d05,s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3';	P	I	-4,4	1,04
subB	RC_N68871_at	y98c12,s1 Homo sapiens cDNA clone 46410 3' similar to contains Alu repetitive element;contains MSR1 repetitive element ;;	P	I	2,8	0,66
subA	AA129196_at	za23h07,s1 Homo sapiens cDNA clone 293437 3' similar to contains Alu repetitive element;;	P	I	3,7	1,07
subA		zn29d08,r1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 548847 5' similar to SW:NU1M_				
subA		MOUSE P03888 NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 1 ;;				
subA	RC_AA620553_s_at	H, sapiens partial cDNA sequence; clone c-3jg08;	P	I	3	0,98
subB	RC_F10779_at	H, sapiens partial cDNA sequence; clone c-3mb07;	P	I	3	0,83
subB	RC_F10945_at	y72d10,s1 Homo sapiens cDNA clone 210835 3';	P	I	3,5	1,63
subB	RC_H65650_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3';	P	I	4,6	3,2
Increase in T1+T2 Mix +T2 solid						
subA	RC_AA417030_at	zu04e07,s1 Soares testis NHT Homo sapiens cDNA clone 730884 3';	P	I	6,9	3,38
subA	RC_AA608545_at	H, sapiens partial cDNA sequence; clone c-3mb07;	P	I	-7,0	2,41
subB	RC_F10945_at	yz53a12,s1 Homo sapiens cDNA clone 286750 3';	P	I	3,5	1,63
subB	RC_N68038_f_at		P	I	4,6	3,2

Fig. 17.34

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Chip	Probe Set	Description	T2 Mix Abs Call	Diff Call	Fold Change	Sort Score
Increase in T1+T2 Mix subA	RC_AA176164_i_at	zp23h11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 610341 3';	P	I	-6.9	1.98
subA	W52431_at	zo45b12.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDNM_RAT	P	I	28.2	26.64
subB	RC_AA019541_at	P14730 WDNM1 PROTEIN, [2] PIR:S07807 .;	P	I	-6.1	3.2
subB	RC_H13696_at	contains element L1 repetitive element;;	P	I	-29.4	23.76
subB	RC_N22404_at	yf09e04.s1 Homo sapiens cDNA clone 148254 3';	P	I	-43.4	34.65
subB	RC_R07501_at	yw37h03.s1 Homo sapiens cDNA clone 254453 3';	P	I	3.8	2.58
subA	C14412_s_at	ye97f06.s1 Homo sapiens cDNA clone 125699 3';	P	I	3.4	3.28
subA	RC_AA236455_s_at	Human fetal brain cDNA 5'-end GEN-055A09;	P	I	6.4	5.66
subA	RC_AA417030_at	zr75g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669266 3';	P	I	5.1	1.98
subB	RC_F10945_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3';	P	I	3.3	1.25
subB	RC_N29319_at	H, sapiens partial cDNA sequence; clone c-3mb07;	P	I	7.8	5.05
subB	RC_N68038_f_at	yw84a11.s1 Homo sapiens cDNA clone 258908 3';	P	I	6.9	6.69
Increase in T1+ T2 Solid						
subA	RC_AA417030_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3';	P	I	5.1	1.98
subA	RC_AA608545_at	ae53d05.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3';	P	I	-6.5	2.49
subB	RC_H09261_at	yf88c12.s1 Homo sapiens cDNA clone 46410 3' similar to contains	A	NC	-2.8	0.26
subB	RC_N68871_at	Alu repetitive element; contains MSR1 repetitive element;;	A	NC	-2.3	0.36
subA	AA129196_at	za23h07.s1 Homo sapiens cDNA clone 293437 3' similar to contains	P	MI	4.1	1.39
		Alu repetitive element;;				
		zn29d08.r1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 548847 5' similar to SW:NU1M_				
		MOUSE P03888 NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 1;;				
subA	RC_AA620553_s_at	H, sapiens partial cDNA sequence; clone c-3lg08;	P	NC	3	1
subB	RC_F10779_at	H, sapiens partial cDNA sequence; clone c-3mb07;	P	I	2.7	0.64
subB	RC_F10945_at	yf72d10.s1 Homo sapiens cDNA clone 210835 3';	P	I	3.3	1.25
subB	RC_H65650_at	yz53a12.s1 Homo sapiens cDNA clone 286750 3';	P	I	2.8	0.91
subB	RC_N68038_f_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3';	P	I	6.9	6.69
Increase in T1+T2 Mix +T2 solid						
subA	RC_AA417030_at	H, sapiens partial cDNA sequence; clone c-3mb07;	P	I	5.1	1.98
subA	RC_AA608545_at	yz53a12.s1 Homo sapiens cDNA clone 286750 3';	P	I	-6.5	2.49
subB	RC_F10945_at		P	I	3.3	1.25
subB	RC_N68038_f_at		P	I	6.9	6.69

Fig. 17.35

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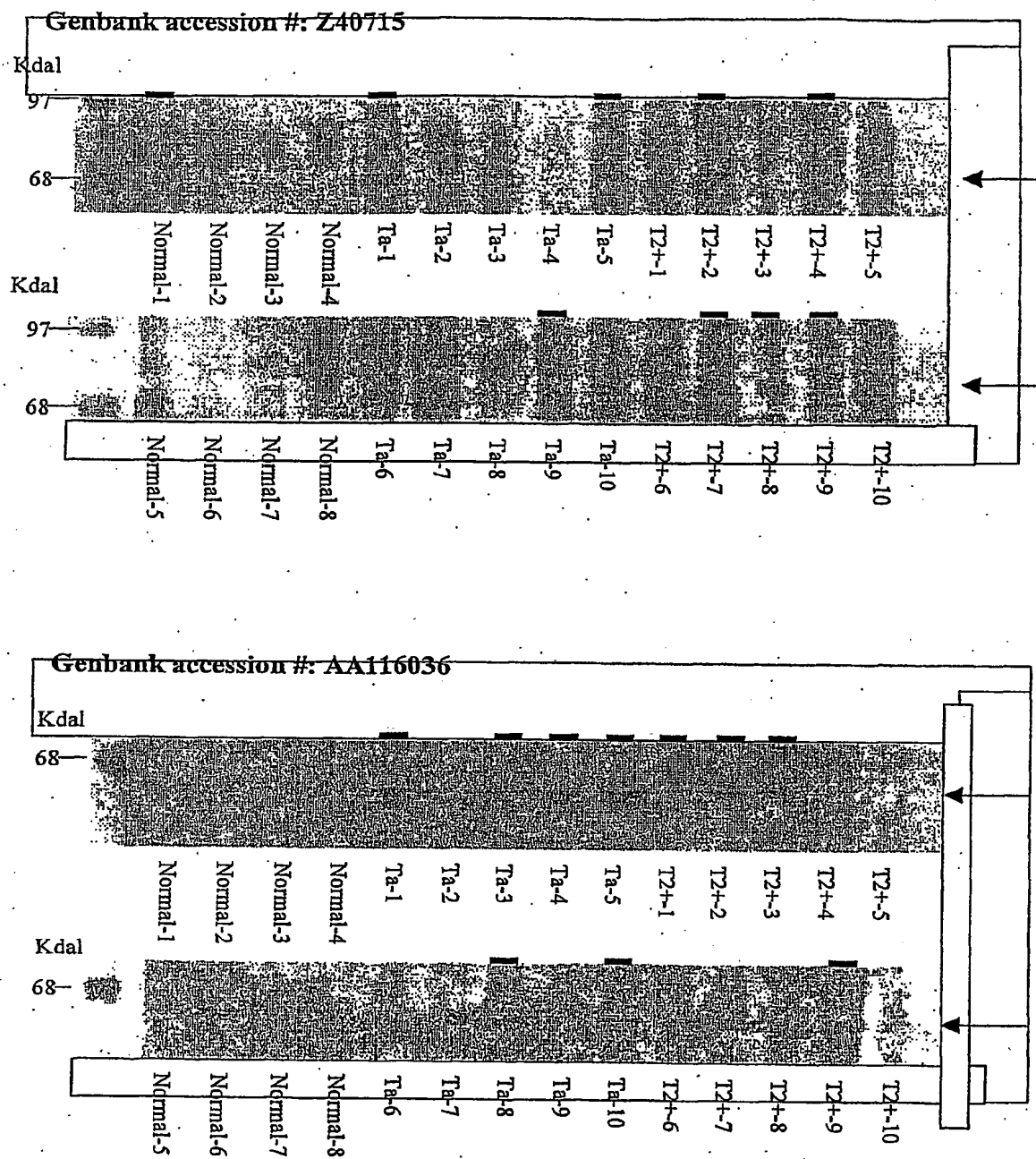
Chip	Probe Set	Description	T2 Solid			Sort Score
			Abs Call	Diff Call	Fold Change	
Increase in T1+T2 Mix subA	RC_AA176164_i_at	zp23h11.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone 610341 3',	A	NC	~2,2	0,19
subA	W52431_at	zc45b12.r1 Soares senescent fibroblasts NbHSF Homo sapiens cDNA clone 325247 5' similar to SW:WDMN_RAT	A	D	-1,4	-0,06
subB	RC_AA019641_at	P14730 WDNM1 PROTEIN, [2] PIR:S07807 ;,	P	NC	~1,3	-0,02
subB	RC_H13696_at	contains element L1 repetitive element ;,	A	NC	~1,7	0,07
subB	RC_N22404_at	yj09e04.s1 Homo sapiens cDNA clone 148254 3',	A	NC	~2,4	-0,18
subB	RC_R07501_at	yw37h03.s1 Homo sapiens cDNA clone 254453 3',	A	NC	1,3	0,1
subA	C14412_s_at	ye97f06.s1 Homo sapiens cDNA clone 125699 3',	P	I	2,3	1,05
subA	RC_AA236455_s_at	Human fetal brain cDNA 5'-end GEN-055A09,	P	NC	2,6	0,83
subA	RC_AA417030_at	zr75g02.s1 Soares NhHMPu S1 Homo sapiens cDNA clone 669266 3',	P	I	~4,6	1,57
subB	RC_F10945_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',	P	I	3,5	1,61
subB	RC_N29319_at	H, sapiens partial cDNA sequence; clone c-3mb07,	P	NC	~2,1	0,29
subB	RC_N68038_f_at	yw84a11.s1 Homo sapiens cDNA clone 258908 3',	P	I	3,3	1,54
Increase in T1+ T2 Solid		yz53a12.s1 Homo sapiens cDNA clone 286750 3',	P	I		
subA	RC_AA417030_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',	P	I	~4,6	1,57
subA	RC_AA608545_at	ae53d05.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone 950601 3',	P	I	~4,7	1,54
subB	RC_H09261_at	yj98c12.s1 Homo sapiens cDNA clone 48410 3' similar to contains	P	I	~3,7	0,83
subB	RC_N68871_at	Alu repetitive element;contains MSR1 repetitive element ;,	P	I	~4,9	2,35
subA	AA129196_at	za23h07.s1 Homo sapiens cDNA clone 293437 3' similar to contains	P	I	9,5	5,74
subA		Alu repetitive element;,				
subA		zn29d08.r1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone 548847 5' similar to SW:NU1M_				
subA		MOUSE P03888 NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 1 ;,				
subA	RC_AA620553_s_at	H, sapiens partial cDNA sequence; clone c-3lg08,	P	I	5,3	3,24
subB	RC_F10779_at	H, sapiens partial cDNA sequence; clone c-3mb07,	P	I	3,2	0,95
subB	RC_F10945_at	yr72d10.s1 Homo sapiens cDNA clone 210835 3',	P	I	3,5	1,61
subB	RC_H65650_at	yz53a12.s1 Homo sapiens cDNA clone 286750 3',	P	I	3,6	1,66
subB	RC_N68038_f_at		P	I	3,3	1,54
Increase in T1+T2 Mix +T2 solid						
subA	RC_AA417030_at	zu04e07.s1 Soares testis NHT Homo sapiens cDNA clone 730884 3',	P	I	~4,6	1,57
subA	RC_AA608545_at	H, sapiens partial cDNA sequence; clone c-3mb07,	P	I	~4,7	1,54
subB	RC_F10945_at	yz53a12.s1 Homo sapiens cDNA clone 286750 3',	P	I	3,5	1,61
subB	RC_N68038_f_at		P	I	3,3	1,54



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Fig. 18

## Western blot - polyclonal antibodies



## INTERNATIONAL SEARCH REPORT

Int'l Application No  
PCT/DK 01/00463

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C12Q1/68 A61K48/00 A61K39/395 A61K38/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>WO 00 52204 A (ORNTOFT TORBEN F) 8 September 2000 (2000-09-08)</p> <p>abstract</p> <p>---</p> <p>-/--</p>	<p>1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

14 November 2001

Date of mailing of the international search report

17. 12. 2001

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Patrick Andersson

## INTERNATIONAL SEARCH REPORT

In Application No  
PCT/DK 01/00463

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MARC O GRIMM ET AL: "Expression and progression pattern of transitional cell carcinoma of the bladder" THE JOURNAL OF UROLOGY, vol. 163, no. 4, May 2000 (2000-05), page 127 XP002902076  abstract	1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113
X	WO 99 51772 A (INCYTE PHARMA INC) 14 October 1999 (1999-10-14)  page 10, line 15 - line 20	1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113
X	WO 97 10365 A (AFFYMAX TECH NV ) 20 March 1997 (1997-03-20)  page 1, line 16 -page 2, line 2	1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113
X	WO 98 53319 A (UNIV JOHNS HOPKINS (US)) 26 November 1998 (1998-11-26)  abstract	1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113
X	WO 95 21944 A (SMITHKLINE BEECHAM CORP ) 17 August 1995 (1995-08-17)  abstract	1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113

## INTERNATIONAL SEARCH REPORT

In ☐ International Application No  
PCT/DK 01/00463

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 30389 A (MILLENNIUM PHARM INC) 3 October 1996 (1996-10-03)  abstract  ----	1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113
A	TORBEN F ORNTOFT ET AL: "Molecular alterations in bladder cancer" UROL RES, vol. 26, 1998, pages 223-233, XP002902077  page 229, column 2, line 24 -page 230, column 1, line 9  -----	1-10, 19-42, 46, 50-61, 70-86, 88,89, 91-93, 95-113

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/DK 01/00463

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 86-96  
because they relate to subject matter not required to be searched by this Authority, namely:  
see FURTHER INFORMATION sheet PCT/ISA/210
2. ☒ Claims Nos.: 11-18, 43-45, 47, 48-49, 62-69, 87, 90 and 94  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International Application No. PCT/DK 01/00463

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Claims Nos.: 86-96

Claims 86-96 relate to methods of treatment of the human or animal body by therapy practised on the human or animal body. See PCT Rule 39.1 (iv). Nevertheless, a search has, when possible see Box 1.2, been executed for these claims. The search has been based on the alleged effects of the compounds.

-----

Continuation of Box I.2

Claims Nos.: 11-18,43-45,47,48-49,62-69,87,90 and 94

The present application relates to a method for determining biological condition in animal tissue. Present claims 11-18,43-45,47,48,49,62-69,87,90 and 94 lists approximately 700 different postings from the database UniGene that can be used alone or in combination to analyse tissue. In view of the large number of possibilities- not limited even by a general functionality - render it difficult, if not impossible, to determine the matter for which protection is sought. The present claims fails to comply with the clarity and conciseness requirements of Article 6 PCT to such extent that a meaningful search is impossible. Consequently, no search report has been established for claims 11-18,43-45,47,48-49,62-69,87,90 and 94.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Int: I Application No  
PCT/DK 01/00463

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0052204	A	08-09-2000	AU WO 3316600 A 0052204 A2	21-09-2000 08-09-2000
WO 9951772	A	14-10-1999	US EP WO 6004755 A 1075542 A1 9951772 A1	21-12-1999 14-02-2001 14-10-1999
WO 9710365	A	20-03-1997	US AU CA EP JP WO 6040138 A 7073496 A 2232047 A1 0853679 A1 11512293 T 9710365 A1	21-03-2000 01-04-1997 20-03-1997 22-07-1998 26-10-1999 20-03-1997
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